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ABSTRACT

This study analyzed the demographic and scholastic characteristic differences between a nontraditional and traditional student cohort (total n=11,878) at Ferris State University (FSU) in Michigan, identified (through literature reviews) successful recruiting and retention activities for nontraditional students at other postsecondary educational institutions in the United States, generalized the findings between nontraditional students in the United States and those at the college, and developed an action plan affecting recruitment and retention of nontraditional students at the university. Among the findings were that FSU currently lags behind national trends in the percentage of nontraditional students and exhibits several characteristics that were considered inhibitors in recruiting and retaining nontraditional students. Among the corrective recommendations offered were the following: (1) implementation of inservice training on the characteristics, motivations, learning styles, and needs of nontraditional students; (2) development of marketing strategies geared toward adult learners; (3) removal of barriers through the offering of services during evening and weekend hours; and (4) periodic evaluation of recruitment and retention efforts to identify strengths and weakness of current activities. Appendices making up 40 percent of the document include letters of support, a mission and role statement, enrollment data, and responses to the questionnaire. Contains a 112-item bibliography. (GLR)

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THE NONTRADITIONAL STUDENT AT FERRIS STATE UNIVERSITY: IMPLICATIONS FOR RECRUITMENT AND RETENTION

by

Sharon K. Octernaud

A Major Applied Research Project presented in
partial fulfillment of the requirements
for the degree of Doctor of Education
Nova University
June, 1990

HE 025 728

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Abstract of a Major Applied Research Project Presented
to Nova University in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

THE NONTRADITIONAL STUDENT AT FERRIS STATE UNIVERSITY: IMPLICATIONS FOR RECRUITMENT AND RETENTION

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June, 1990

As the number of high school graduates decreases, Ferris State University (FSU) will increasingly compete with the other fourteen state universities, community colleges, and private schools for high school students. Therefore, in an effort to maintain current enrollment levels, Ferris will need to recruit actively nontraditional students (students aged twenty-five and older).

The recognition of and adaptation to the changes in the Ferris student population are of utmost importance to the university if administrators and faculty are to assess successfully the effects of this population on the institution's academic programs and fiscal health. Prior to this study, no one at Ferris had analyzed the demographic and scholastic characteristic differences between the nontraditional student (twenty-five and older) and the more traditional student cohort (younger than age twenty-five).

The purpose of this case study was to (1) identify the demographic differences between the nontraditional student and the traditional student at Ferris; (2) identify, from a review of the literature, successful recruiting and retention activities for nontraditional students at other postsecondary educational institutions in the United States; (3) attempt to generalize the findings from the literature relative to the nontraditional student in the United States to the nontraditional student at Ferris State University with an emphasis on student recruitment and retention; and (4) develop an action plan impacting procedures and policies affecting the recruitment and retention of nontraditional students at Ferris State University.

This study examined all of the students (11,878) enrolled in credit classes at Ferris State University on the fifth day of classes during the fall quarter of 1989. Information was collected on variables that included: age, gender, race or ethnic background, home location as determined by zip code, full-time or part-time enrollment, transfer credit, high school grade point average, ACT composite, and distribution in Ferris programs. After identification of these characteristics, the demographic differences between the nontraditional student and the traditional student were determined.

Successful recruiting and retention activities for nontraditional students at American postsecondary institutions were identified from a review of the literature. In addition, a questionnaire was mailed to seven FSU personnel to determine their perceptions of the institution's current recruiting and retention activities for nontraditional students. Lastly, Ferris State University catalogs, brochures, and admissions letters were reviewed to determine if these materials were adequately designed to meet the needs of the nontraditional student.

This study concluded: (1) future researchers should strive toward greater consistency when defining the student population aged twenty-five and older; (2) due to the nature of Ferris State University and its physical location, recruitment and retention activities used at other postsecondary institutions should be evaluated carefully for appropriateness before being adopted at Ferris; (3) Ferris State University currently lags behind national trends in the percentage of nontraditional students served at the institution; (4) information is the key to every aspect of a student's academic endeavor; (5) looking at the demographic profiles of all students, of

nontraditional students, or of traditional students is insufficient without taking into account the context of the institution or the program; (6) respondents to the questionnaire indicated an awareness of the issues involved with the recruitment and retention of nontraditional students; (7) the reading level found in FSU school bulletins, informational program brochures, and admissions letters was too high for students entering FSU and these documents rarely depicted adult learners in photos; (8) a large number of local adults needs to be convinced that there is much to be gained through education; and (9) there is a need for FSU academic and administrative staff to study, discuss, and implement the recommendations made in this document.

This study recommended that: (1) inservice training on the characteristics, motivations, learning styles, and needs of nontraditional students be given to FSU administration, faculty, and staff; (2) deans' offices be provided with student demographic data on disk; (3) technology be used to the fullest extent possible to improve instructional delivery and to streamline administrative procedures; (4) marketing strategies geared toward the adult learner be developed; (5) institutional barriers be removed by offering services during evening and weekend hours; (6) the nontraditional student be considered when developing strategic plans for the institution; (7) FSU implement the recommendations presented in this document as quickly as possible to meet the recruitment and retention needs of nontraditional students at Ferris State University; and (8) periodic evaluation of recruitment and retention efforts be made to identify the strengths and weaknesses of current activities. A five-page action plan summarizing the study and its findings was presented to the vice president of academic affairs for consideration.

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Chapter 1

INTRODUCTION

A review of the literature reveals that the American postsecondary student population is changing. Norman Kaufman was responsible for a number of comparative studies of education in the United States. He states that

> The aging of the baby-boom cohort, interstate migration from northeastern and midwestern regions to the Sunbelt, declining fertility rates and family size for middle- and upper-income whites, and increasing fertility rates and family size for selected other population groups are just some of the demographic forces that affect the potential number of students for institutions of postsecondary education (1986:21).

The United States Bureau of the Census (1988:4) projects an overall aging of the U.S. population. In 1987, the median age of the U.S. population was at a record high of 32.1 years. The middle-series census estimates the U.S. population to reach a median age of thirty-six years by the turn of the century, forty-two years in 2030, and forty-four years in 2080.

Without a doubt, adults are becoming the dominant age group in American society and the percentage of older college students is increasing. In 1986, adults twenty-five and older accounted for more than thirty-eight percent of all college students whereas in 1976 they comprised only thirty-three percent (Ottinger, 1989:51). The Carnegie Commission and the Newman Report both predict that "by the year 2000, sixty percent of all students in higher education will be nontraditional" (Lace, 1986:10).

The demographic trends affecting the nation as a whole affect Michigan in a similar fashion. The number of high school graduates in Michigan has declined by more than twenty percent since the early 1980s (Michigan Department of Education, 1989:1). Projections indicate that Michigan high school graduates will continue to decline an additional ten percent by 1995 and then rebound slightly. However, during this same time period, the total number of students enrolled in Michigan higher education has declined much less steeply (Department of Management and Budget, 1988). Nationally, the nontraditional students (students age twenty-five and older) account for a higher percentage of both full-time and part-time students (Ottinger, 1989:45). This trend is also reflected at Ferris (Sytsma, 1990).

Statement of the Problem

As the number of high school graduates decreases, Ferris State University (FSU) will increasingly compete with the other fourteen state universities, community colleges, and private schools for high school students.

Therefore, in an effort to maintain current enrollment levels, Ferris will actively recruit nontraditional students. "Given the complex demographic changes that the nation is undergoing, planners cannot rely on extrapolation of past trends to predict the future" (Kaufman, 1986:36).

Recognizing and adapting to the changes in the Ferris student population are of utmost importance to the university if administrators and faculty are to successfully assess the effects of this population on the institution's academic programs and fiscal health. The future of the institution depends upon the ability of Ferris personnel to forecast the needs of their students and in the willingness of the academic and administrative staff to serve those needs. However, to date, no one at Ferris State University has analyzed the demographic and scholastic characteristic differences between the nontraditional student and the more traditional student cohort (Appendix A, January 30, 1990).

Purpose of the Study

The purpose of this case study is:

1. To identify the demographic differences between the nontraditional student and the traditional student at Ferris;

2. To identify from a review of the literature successful recruiting and retention activities for nontraditional students at other postsecondary educational institutions in the United States;

3. To attempt to generalize the findings from the literature relative to the nontraditional student in the United States to the nontraditional student at Ferris State University with an emphasis on student recruitment and retention; and

4. To develop an action plan impacting procedures and policies affecting the recruitment and retention of nontraditional students at Ferris State University.

Major Issues

This study addresses the following major issues.

1. Ferris State University administrators have not looked at the demographic characteristics of the student population aged twenty-five and older.

2. If university personnel do not understand both the characteristic and consequent learning style differences between students aged twenty-five and older and those younger than age twenty-five, they cannot be expected to treat the two populations differently.

3. This study is complex due to the lack of a precise definition of the adult learner or the nontraditional

student in the literature, the wide span of ages and numerous life-transition stages encompassed by the adult learner, and the variety of postsecondary institutions (liberal arts, technical, four-year, two-year) represented in the literature.

4. This study will identify existing recruitment and retention activities for the nontraditional student at other institutions that may impact Ferris policies in these areas.

5. Ferris State University administrators recognize that the adult student population will become an increasingly important portion of the student population. They are supportive of this study and will seriously consider a concise list of recommendations to influence Ferris policy in the area of nontraditional student recruitment and retention.

Background and Significance

Ferris State University and Its Mission

Ferris State University is located on the southern edge of Big Rapids, Michigan, a city of approximately twenty thousand (including students) in the vacation-recreation area of west central Michigan. Over eleven thousand students are enrolled in courses with more than five hundred professional personnel and over seven hundred nonacademic personnel serving them.

Ferris is an open admissions institution offering career-oriented programs ranging from the certificate level to the graduate degree. Most of the curricula feature a hands-on approach to education where quality teaching is emphasized. State-of-the art equipment is used in the classroom to instruct high-quality technical programs.

The Ferris State University mission and role statement is included in Appendix B of this document. The following passage succinctly describes the mission of the institution.

> Within the limits of its resources, Ferris State is dedicated to educating all students who possess the requisite capacity to learn, for the purpose of preparing them to perform the skills required for them to succeed in their chosen occupations and fulfill their career objectives (Ferris State University, March, 1990:1).

Significance of the Study

In keeping with the institutional mission, the administration desires to implement measures to enhance the chances of success for its student body. A higher retention rate not only increases the likelihood of success for the nontraditional student, but it also serves as a means of augmenting institutional enrollment. It is less costly to the institution to increase student services and retain an enrolled student than it is to recruit and orient a new student.

In addition to partially fulfilling the institution's stated mission and contributing to its economic well-being, increased retention serves a humanitarian purpose as well. Students who succeed are spared the psychological trauma of failure and do not forfeit their tuition investment (Kuh, 1986:4).

Hughes (1983:61) compiled a synthesis on the literature of the nontraditional student in higher education. He found that

> With few exceptions, institutional response to non-traditional students appears to be a series of efforts each designed to resolve an immediate problem. It is, admittedly, difficult to do otherwise. However, a fragmented response has the potential to erode both an institution's ability to attract and to retain non-traditional students. Whereas, a more comprehensive response may provide an important recruiting advantage in a highly competitive marketplace. A more comprehensive response may increase non-traditional student satisfaction and in turn improve retention rates. The tradeoff warrants careful consideration.

Administrative Support for the Study

Administrative personnel recognize the importance of determining the characteristics of the nontraditional Ferris student in order to improve recruiting and retention activities. However, North Central accreditation, state, and federal reports have not required demographic or scholastic data specific to the nontraditional student at Ferris. Because it has not been requested, studies on this Ferris student populace have not been made.

Staff in the Office of Academic Affairs and in the Office of Institutional Research have indicated their interest in and commitment to this project. Letters of support are included in Appendix A of this document.

Research Questions

This study addresses the following research questions.

1. What are the characteristics of the nontraditional students and the traditional students at Ferris State University? Variables to be compared are:

   A. Demographic characteristics: Age, gender, race or ethnic background, home location as determined by zip code, full- or part-time enrollment, transfer credits

   B. Previous academic performance: High school grades

   C. Ability: ACT composite

   D. Distribution in FSU programs

2. What successful recruiting and retention activities exist for nontraditional students at other educational institutions in the United States?

3. What are the current FSU recruiting and retention activities for nontraditional students?

4. Which recruiting and retention activities used at other American educational institutions could be applied at Ferris to recruit and retain nontraditional students?

5. What are appropriate elements for an action plan impacting procedures and policies affecting the recruitment and retention of nontraditional students at Ferris State University?

Definition of Terms

Several terms associated with this major applied research project may require further clarification. These include:

1. ACT Composite Score - One of five academic test scores on American College Testing Program assessment battery given to candidates for college entrance.

2. Androgogy - A term developed by Knowles to identify the art and science of helping adults to learn.

3. dBase III - A microcomputer-based data base manager.

4. FSU full-time student - A student enrolled in twelve or more quarter hours of classes.

5. FSU nontraditional student or FSU adult learner - A student aged twenty-five and older when first enrolled at Ferris State University.

Because many students require more than four years to complete a four-year degree and because a more traditional student cohort over the age of twenty-five can be completing a degree in pharmacy or optometry, this study defines the nontraditional student population as one which is twenty-five years of age or older when first enrolled at Ferris.

6. FSU part-time student - A student enrolled in less than twelve quarter hours of classes.

7. FSU traditional student - A student younger than age twenty-five when first enrolled at Ferris State University.

8. Lotus 1-2-3 - A microcomputer-based spreadsheet program with graphics capabilities.

9. PC-File+ 5.0 - A microcomputer-based data base management program.

10. Reflex - A microcomputer-based data base program capable of performing complex cross tabulations.

Limitations

This study is limited in scope in the following ways:

1. This study is concerned with the demographic data of all students enrolled in credit courses at Ferris State University on the fifth day of classes during the fall quarter of 1989. Therefore, no inferences can be drawn

regarding the similarity and differences of this data with previous student groups at Ferris or those at other postsecondary institutions.

2. The findings and recommendations are institution-specific thus limiting the generalization of conclusions.

Assumptions

This study and results are predicated upon three basic assumptions. These are:

1. The basic data collected during the course of this study will be both complete and accurately recorded.

2. The responses to the questionnaire distributed to Ferris personnel will be reliable and valid.

3. The study will be of value to Ferris State University and the action plan will be given consideration.

Chapter 2

REVIEW OF RELATED LITERATURE

Building upon the classic readings of adult educators such as Cross (1984) and Knowles (1980), a preliminary search of the last five years of literature was undertaken to identify and review research pertinent to the recruitment and retention of students aged twenty-five and older in postsecondary institutions. This preliminary search included works in Dialog, in Educational Resources Information Clearinghouse (ERIC), and in the Donnelley Demographic data bases. A manual search of the Thesaurus of Eric Descriptors, Resources in Education (RIE), and the Current Index to Journals in Education (CIJE) was completed to determine the best descriptors for this type of study. The descriptors used for this search included: nontraditional students, reentry students, adult students, higher education, postsecondary education, undergraduate study, demography, population trends, data collection, race, ACT, composite, geographic, location, gender, sex, grade point average, recruitment, admission, student recruitment, remedial instruction, remedial programs, and study skills.

By combining the descriptors in various sequences, abstracts for 239 articles were obtained. These abstracts were reviewed and seventy articles were read in their entireties. Additional articles of interest were noted by consulting the bibliographies of these seventy articles. These writings were then obtained for further consultation.

During the review of the literature, on occasion studies prior to 1985 were cited that appeared applicable to the current Ferris setting. When this was the case, these reports were acquired and reviewed in greater detail.

A review of the literature revealed inadequate research on the subject of the nontraditional student. Hughes (1983:51) attributes this in part to the ambiguity of definition for the nontraditional student.

> Returning students, stop-outs, re-entry students, older students, and adult learners have been variously used in the literature. Although disabled, minority, and economically disadvantaged students have often been labeled non-traditional, they constitute distinct populations with needs and characteristics quite different than the older or returning non-traditional student.

Furthermore, the research on nontraditional students tends to be institution specific and relies heavily upon descriptive or survey data that are self-reported. Hughes (1983:52) indicates that

> Experimental and longitudinal designs, which could potentially be illuminating, are virtually non-existent. The existing research frequently does not adequately control for systematic variation from extraneous sources. Bias could occur because many

samples are predominantly composed of respondents who are accessible and cooperative. The return rates are often exceedingly low. Bias could occur because many survey instruments are not rigorously developed so as to avoid building in, for example, a tendency to agree with positive statements.

Characteristics and Needs of Nontraditional Students

The profile of adult learning characteristics has been well documented in the literature (Cross, 1984; Knowles, 1980). Knowles (1980:43) "originally defined andragogy as the art and science of helping adults learn, in contrast to pedagogy as the art and science of teaching adults." In The Modern Practice of Adult Education, Knowles (1980:57-58) outlines conditions that are conducive to adult growth and development. These principles of learning include:

1. The learners feel a need to learn.

2. The learning environment is characterized by physical comfort, mutual trust and respect, mutual helpfulness, freedom of expression, and acceptance of differences.

3. The learners accept a share of the responsibility for planning and operating a learning experience, and therefore have a feeling of commitment toward it.

4. The learners participate actively in the learning process.

5. The learning process is related to and makes use of the experience of the learners.

6. The learners have a sense of progress toward their goals.

Although adult learners possess characteristics similar to traditional learners, a review of the literature revealed some basic differences. Because of these contrasts, learning environments for these two groups should not be the same. An andragogical learning environment differs from a pedagogical learning environment in the following ways.

1. In an andragogical setting, the planning and diagnosis of needs and formulation of learning objectives is accomplished through mutual negotiation between the learner and the facilitator. Activities are flexible and often include independent study. Tasks, objectives, and goals are clearly defined. In a pedagogical setting, the teacher designs the course in a structured format and assignments are given without communicating goals and objectives to the students.

2. Adults are progressively self-directed in their studies while children have more dependent personalities. The older student's approach to learning is task- or problem-centered while a younger student's approach is subject-centered. For adults, the application of new skills is immediate whereas children tend to have a postponed application of skills. Adults expect good teaching and communicate dissatisfaction when the learning

experience does not meet expectations. Children are accepting of their learning environments.

3. Adults tend to have multiple life roles while children are full-time students. An andragogical setting is made up of a heterogeneous group of learners whereas a pedagogical setting yields a more homogeneous group.

4. Children usually are taught a subject according to an age time frame using content units. Adult learning is triggered when adults move from one life stage to another and subject matter is sequenced in terms of readiness using problem units.

5. After being away from school for an extended period of time, adults bring a rich resource of life experiences to the learning environment for themselves and others to build upon. For younger students, school is a recent and continuing part of life and they are still in the beginning stages of acquiring life experiences.

6. Adults are motivated by internal incentives whereas children are motivated by outside rewards and punishments.

7. An andragogical setting is relaxed, trusting, collaborative, and supportive. A pedagogical setting often is authority-oriented, formal, and competitive.

8. In an adragogical setting, evaluation is criterion-referenced often using learner-collected

evidence. A pedagogical setting uses grades and norm-referenced criteria.

Nontraditional Student Composite

Although a profile of adult learning characteristics can be compiled, a meaningful composite of the nontraditional student cannot. A review of the literature indicates that nontraditional students do not comprise a single population. In fact, Parnell (1989:5) created a simple multiple-choice test illustrating this phenomenon. The test consisted of two questions:

> 1. Terry, living at home, works full-time and attends the local college part-time in the evenings and on weekends. Terry is
> a. an 18-year-old single male and recent high school graduate,
> b. a 30-year-old married female with two children,
> c. a 40-year-old divorced father,
> d. a 50-year-old married male seeking a job change.
>
> 2. Chris, residing off-campus in an apartment, works part-time and attends college full-time during the day. Chris is
> a. a 21-year-old married male and GED recipient,
> b. a 35-year-old divorced female,
> c. a 55-year-old widowed grandmother,
> d. a 68-year-old retired male.

The answer to both of the questions is all of the above. Parnell (1989:5) states that "there simply is not a typical 'college student' today. They come in all sizes, shapes, ages, nationalities, ethnic minorities -- and academic intentions."

Because nontraditional students bring such a diversity to the classroom, this group cannot be considered and treated as a large group. The demographic characteristics for each group of adult learners must be considered when determining recruitment and retention activities.

Types of Adult Learners

Hughes (1983:52) identifies five types of adult learners: non-directed, social, stimulation-seeking, career-oriented, and life change learners. Each type is very different from the other and "this serves to underscore the difficulty of making any meaningful generalizations by examining solely non-traditional student characteristics." Hughes notes that three characteristics seem to consistently differentiate the nontraditional students from the traditional students: multiple commitments, off-campus directedness, and informal education.

Need for Increased Skills

The growing demand for adult educational opportunities has occurred in response to economic and social changes in the United States during the past fifteen years. "An estimated seventy-five percent of currently available jobs require some postsecondary education" (Kohl, 1989:5). A Hudson Institute report indicates that most of the new jobs and new wealth will be created by service industries. The new jobs in these industries will demand higher skill levels in reading, in following directions, and in math. Demographic trends in the work force, along with increased skill requirements will lead to more unemployment among the least-skilled people. With this type of change in the job market, many workers will return to school to upgrade their skills (Johnston, 1987).

Gender As a Factor

Whereas the emergence of an information society and new technology resulted in a need for increased skills at the workplace, the changing role of women in society is attributable for the increase in female students. "Most new jobs are taken by women, and a majority of the working women have dependent children" (Shearon, 1989:324). Many of these women will re-enter school to acquire new skills or to upgrade existing skills. Today, women thirty-five and over account for one of the fastest growing student groups on college and university campuses (O'Connor, 1985:5).

The literature indicates that "nontraditional women students face unique difficulties not dealt with by nontraditional men students because of differing goals and differing family responsibilities (Hughes, 1983:55). These findings are supported by earlier research done by Hooper and March (1980), and Tittle and Kenker (1977).

Race and Ethnic Background As a Factor

The changing demographics in race and ethnic backgrounds also affects higher education. By 2080, the black population is predicted to be eighteen million larger than in 1987 (U.S. Bureau of the Census, 1988:9). The same report indicates that the growth of the other-races population will be extraordinarily rapid as well. In contrast to these statistics, the American Council on Education reports that minorities are earning fewer degrees (Ottinger, 1989:25).

Age As a Factor

In addition to adults returning to school to acquire skills for their present jobs or to make a career change, trends seem to suggest that the rising educational attainment of the general population will result in increased demand for learning activities by older students (O'Connor, 1985:i). "Over seventy million people, nearly thirty percent of the population, are age fifty or older. If current trends prevail, this will be the only group experiencing significant increases in the next century" (Conklin, 1989:4). To date, this population has been seriously under-represented in the classroom nationwide (Conklin, 1989:10). In the future, this group will be an increasingly important market.

Recruitment of Adult Learners

Pitt Community College (1985) in Greenville, North Carolina, sponsored by the North Carolina State Department of Community Colleges, developed a recruitment model for reaching nontraditional students in North Carolina in two-year colleges. The first step in the Pitt recruitment model requires that the institution defines its goals for an adult recruiting program. "An institution must know what it is setting out to accomplish and must have a standard with which to evaluate the results" (Pitt Community College, 1985:8). In determining these goals, it is essential that the mission and purpose of the institution be considered.

> Recruitment always begins with advanced planning. An effective promotion cannot be developed without planning and implementation time. If recruitment is to be an institutional effort, planning must involve all staff to familiarize them with the promotions, to define or target audiences, to determine how to best reach target groups and to determine the goals of the program in terms of enrollment and institutional income. Clear internal communications and interdepartmental knowledge is a prerequisite to successful planning and ultimate promotion (Pitt Community College, 1985:75).

A clear understanding of the needs of the marketplace is crucial to an effective marketing program (Kotler, 1984). Hughes (1983:56) extracted several key points from the literature regarding the needs of nontraditional students. He summarizes their service and support needs as including the need for convenient and accessible services, the need to be thoroughly oriented, the need to receive accurate information through regular communication, the need for financial support, the need for child care, the need of career counseling services, and the need of appropriate personal counseling.

In order for an institution to define the educational needs of the target populations, the Pitt recruitment model recommends an external audit of the service area population. Demographic and socioeconomic data on how the service community perceives the institution must be obtained (Pitt Community College, 1985:9). After the external audit has been completed, the Pitt recruitment model requires an internal student survey to obtain further information for targeting purposes (1985:21). The internal and external audits will most likely identify the following segments in the service population: senior citizens, those seeking education for workforce reentry, displaced homemakers, occupationally mobile workers, and technical scholars. Each of the identified target populations will require specialized marketing strategies.

Lace identified four important segments in the complex process of marketing: product, price, place, and promotion (1986:11). When managing adult education in the future, the need of marketing expertise will increase, but not the funds available to purchase it. Therefore, "time will need to be spent by the entire staff in developing comprehensive marketing strategies with a high service focus (Smith and Offerman 1989:256).

Marketing the Product

The products offered by postsecondary institutions to nontraditional students are courses and degrees. Although institutions have limitations placed on them by state coordinating boards, they still need to be more active in seeking out the needs and preferences of potential students (Lace, 1986:11).

"Recruitment and retention efforts can be targeted to the appropriate population if more information is known about the relationship of adult motivational orientations to persistence and college success" (Rogers, Gilleland and Dixon 1988:198). In Adults As Learners, Cross (1984) identifies several reasons why adults return for education. These reasons can be categorized as social relationships, external expectations, social welfare, professional advancement, escape or stimulation, and cognitive interest. All of the reasons found in these categories can be used as motivators for adult recruiting.

Once target groups and the motivations for returning to school have been identified, the Pitt Community College model recruitment plan advocates the formation of an institution-wide advisory group. Representatives from the administrative staff, faculty, support staff, and student resource groups would work as a team to develop a recruiting plan (1985:40). In addition to the internal advisory group, supplementary advisory groups composed of individuals from the target audience or individuals with influence in the community would be formed. These groups would serve as additional resources for the institution in determining nontraditional student program and service needs (Pitt Community College, 1985:41).

Marketing the Price

Cetron, Rocha and Luckins (1988:33) in "Long-Term Trends Affecting the United States" predicts that education costs will continue to rise. He states that the institutions will be faced with increasing pressure to control costs, that two-year colleges and associate degrees will grow, and that loans rather than grants will constitute the main source of student financial aid.

Lace (1986:11) notes that the cost of a postsecondary education is an important factor but recognizes that it is one over which institutions have little control. Financial decisions rest with regents, boards of trustees, legislators, or all three.

Gallien (1986:18) suggests that institutions form partnerships with local companies. By asking how the institution can help meet the company's training needs, in many cases the company will agree to cover employee tuition. Hallmark has been recognized by Fortune and Working Mother magazines, and the book, The Best Companies to Work for in America as being one of the nation's best employers. The chairman of the world's largest greeting card company, Donald J. Hall, has stated that his employees are the company's most valuable resource (Roessing, 1990:32). The company tries very hard to help their people in their educational and growth needs. In 1988, Hallmark spent $430,000 to send employees to school.

Hu (1985:205) conducted a study to measure the reasons given by current and prospective nontraditional students in the northeastern Ohio area for attending or not attending a college or university. The results of this study indicate that tuition costs are not a determining factor when a nontraditional student decides to return to school. Only fifteen percent of Hu's respondents indicated the item "tuition fee too high" as an important factor for not taking courses.

Marketing the Place

Holm (1988:1) found a positive relationship between student persistence and proximity of residence. Unfortunately, like the cost of a postsecondary education, the physical location of the institution is largely out of the hands of educators. However, courses could be offered in locations and at times more convenient to the adult learner (Lace, 1986:11).

Surveys indicate that convenience is the most important consideration for the working adult who is faced with deciding which institution to attend" (Kohl, 1989:5). Institutions could enhance the nontraditional student learning environment by addressing particular concerns and needs. A comprehensive needs assessment of returning adult students was done through the Two-Year College Development Center at the State University of New York at Albany in 1979.

> Returning students rated twelve items significantly more important than the traditional-aged students rated them. These included: preregistration as well as speedy registration procedures, evening and weekend classes and evening and weekend registration; credit

> for out-of-college experiences; and independent study courses (Hughes, 1983:54).

"The packaging of programs or tightening the linkages among separate offerings can also help recruitment efforts" (Donaldson, 1989:71). This type of marketing results in repeat enrollments leading to degrees. This is of additional benefit to the institution as degree seekers are the most loyal participants in continuing higher education (Pappas and Loring, 1980).

Marketing Promotion

A review of the literature has identified several effective recruiting mediums. Postsecondary institutions have successfully used newspapers, cable television, television and radio, direct mailings, outdoor displays, personal recruiting, and brochures to market their programs.

Research conducted by Pitt Community College (1985:76-77) identified the following factors conducive to effective newspaper advertising. For maximum effect, an advertisement placed in the newspaper should be repeated two or three times. Type faces, border, and overall style should be consistent from one advertisement to the next to facilitate recognition. The headline is the most important part of the advertisement. The copy should be written in clear, simple English. The institutional logo should be displayed, white space is essential, and a coupon should be included. The placement of the advertisement in the newspaper also is of importance. The obituary page and classified adverstising section tend to provide excellent exposure.

Pitt Community College (1985:86) found that both traditional and nontraditional black males responded more frequently than did other groups to public service announcements on cable television. This form of advertising incurs no cost other than mailing the copy to the television station.

"Television is the strongest media but it is also the most costly" (Pitt Community College, 1985:87). Radio can deliver a message at a much lower cost. Studies conducted by Pitt Community College indicate that students should be surveyed to determine which stations target groups listen to and then place radio spots accordingly. Additional tips provided in Pitt's marketing strategies include writing copy that is conversational in tone using simple English, repeating the institution's name during the spot, and requesting that listeners respond immediately by telephone.

In order for direct mailings to be effective, appropriate mailing lists must be developed and maintained. Once the names and addresses have been correctly compiled, the direct mailing piece must be created. The research conducted by Pitt Community College (1985:91) identifies the following components as essential to an effective mailing: a clear statement of program objectives, a concise description of the program, a specified target audience, a question and answer approach, a listing of program benefits, a telephone number and alternative response mechanism, simple language, and a prominent position for the institution's name and address.

Posters on the sides of buses or displayed at fairs and conventions are an inexpensive means of promoting the institution (Theriot, 1988:38). Billboards are used strictly as an image-building medium and the message displayed should be limited to five or six words (Pitt Community College, 1985:92).

Theriot and Williams (1988:37) found that "personal contact is invariably more effective than indirect or impersonal promotional avenues." Personal recruiting done in an formal setting can be enhanced with specially prepared slide-tape materials (Wagner, 1989:83). Informally, every employee on campus is involved in the invisible marketing of the institution (Pitt Community College, 1985:93). Empire State College found that its most successful student recruitment method is word of mouth. Students learn of the college and programs from friends, neighbors, and relatives who have earned their degrees at that school. Therefore, much of Empire's marketing effort is directed at making sure every student walks away from campus happy (Gallien, 1986:16).

The Pitt Community College (1985:94) model recruiting program outlines strategies for developing an effective brochure. The brochure should be informally worded to reduce apprehension and provide an answer to a question. Illustrations and photographs should convey the multiple roles fulfilled by nontraditional students. Visuals could include settings in the classroom, with the family, and at the workplace. A map indicating the location of the campus and various student success stories should be included.

Retention of Adult Learners

The literature review produced little research on the subject of nontraditional student persistence or nontraditional student retention in traditional postsecondary programs. Some research was available for nontraditional students in alternative education programs or in noncredit settings. Although the programs in these settings are unlike those offered on the Ferris campus, the literature was explored to determine if any of the retention activities would be applicable to the Ferris setting.

Drawing upon the writings of Cross (1984) and Knowles (1980), Kuh (1986:4) identified four clusters of variables that may be better predictors in retaining nontraditional students than the traditional criteria of high school rank and entrance exam scores. These four cluster variables include:

1. Academic skills -- the level of competence in reading, writing, and math;
2. Clarity of educational goals;
3. Pragmatic concerns -- financial, availability, transfer credit, previous experience credit; and
4. Psycho-social variables -- support from family and employer, vocational purpose, and personal identity.

When educational institutions are aware of their adult student profiles, retention strategies for this group can be developed and implemented by focusing on the four cluster variables. Successful student outcomes are essential if colleges and universities are to survive (Losak, 1986:13).

Academic Skills

A study conducted at Georgia State University indicates that academic assimilation as measured by grade point average is by far the best indicator of persistence (Prather, 1986:1). This same study reveals that high school grades, academic rating of the high school attended, student academic aptitude, and study skills and habits related consistently to retention. Holm (1988:30) concludes that the literature on the retention of adult learners is unanimous on one point. "The amount and level of previous educational achievement is predictive of academic participation and persistence for adult learners."

Shearon (1989:325) notes that perhaps the most troubling change with the influx of adult learners is the increasing number of underprepared students for college-level work. This finding is further supported by studies done by Roueche, Baker, and Roueche (1987). These researchers indicate that at least half of the adults entering community colleges are deficient in essential academic skills.

Clarity of Educational Goals

Kuh (1986:3) was able to identify literature that related educational goals to persistence of students enrolled at community colleges. However, he was unable to find evidence that supported the relationship between goal commitment and attainment of educational goals for adult learners at other types of institutions.

Rogers (1983:278) indicates that "commitment to purpose and to meaning in life is one of the significant elements of change." If adult learners are capable of stating their desired educational goals, their commitment to purpose is enhanced as the end results have been clearly defined.

Pragmatic Concerns

Holm (1988:33) uses three descriptors adapted from Adults as Learners by Cross (1984) when analyzing retention factors in the Program for Individualized Learning (PLI) at the University of Minnesota. The three descriptors are institutional barriers, situational barriers, and psycho-social barriers.

Institutional barriers include those factors that are outside of the learner's control and involved with the organization of the educational institution. Course prerequisites, inflexible scheduling arrangements, complex registration procedures, costly parking permits, and lack of student services at convenient times for adults are examples of institutional barriers.

Situational barriers are related to the situation and circumstances of the student. Situational barriers cited by many adults include lack of time, lack of money, transportation problems, physical distance from school, child care arrangements, and the coordination of school, work, home, and community activities (Holm, 1988; Marlow, 1987).

The third factor includes psycho-social barriers. Some students may have had unpleasant earlier learning experiences. If so, these learners may dislike structured learning and could require individualized attention in their learning programs (Holm, 1988). Other students may view themselves as being too old, lacking in study skills, deficient in certain academic areas, or limited by energy and stamina.

New technology can free adult educators and counselors from routine tasks so that they can dedicate more time to the less formal kinds of teaching and counseling (Lewis,1989:616). In addition to enhancing counseling aspects, new technology can be used to individualize instruction for the apprehensive adult learner.

> Particularly advantageous for undereducated, nontraditional, or reentry students, computers allow individuals to work in a risk-free environment where they can avoid embarrassment, track their own progress, and engage in drill and practice until they achieve competence. As adults work to master ambiguous situations, computers allow individuals to express their curiosity and to demonstrate their creativity (Lewis,1989:614).

Adult learners bring emotional as well as educational perplexities with them to the classroom (O'Connor, 1985:2). Many nontraditional students are experiencing mid-life career changes, others a change in marital status, and some seek self-actualization. Adult nontraditional learners are in a transitional stage just as are their traditional counterparts. However, the transition stages differ and both groups need to be educated about their own transition processes (Champagne, 1987). "Learning has been found to be important for making adjustments to numerous life transitions" (Shearon, 1989:324). Aslanian and Brickell (1980) identified life changes as motivators for adult learning. When something triggers a change in an adult's life, he/she moves from one status in life to another. These triggers could include having a baby, getting fired, having a heart attack, retiring, moving, having children finish school, and getting divorced. To make the transition between stages may require the learning of new knowledge, new skills, new attitudes, or new values.

"Intrusive advising has been effective in increasing the retention and overall academic performance of a variety of high-risk special student populations" (Lopez, 1988:199). In studies conducted by Holm (1988:90), the researcher found that advisor behavior and attention to topics in individual student sessions appeared to have little overall affect on retention. However, there was a relationship between academic persistence and regularity of communication. Furthermore, adult learners required more frequent contact at the beginning of the learning experience than at the end.

Support from the student's family and from his or her employer seem to be related to academic persistence (Kuh, 1986:4). Recognizing this need of familial support, Ohio State University (1987) offers extracurricular activities for students and their families.

Interrelationship of Recruitment and Retention

Tang (1981) points out that retention begins with quality recruitment. Students must be recruited ethically, oriented honestly, informed continuously, and advised developmentally. "The recruitment and the retention of learners are interrelated processes, and the effectiveness of the recruitment process, whether it is organizational or programmatic in origin, sets the tone for retention efforts" (Donaldson, 1989:67). Institutions accommodating nontraditional students proceed through three stages of adaptation: the laissez-faire stage, the separatist stage, and the equity stage (Ackell, 1982).

The laissez-faire stage is characterized by a simple removal of any barriers or artificial constraints on adults. Such factors as age requirements, parental consent forms, sex or racial requirements, and residency requirements are addressed. Thus, adult learners do the best they can within a system that works neither for nor against them. According to Ackell (1982) adults are allowed to be as entrepreneurial and aggressive as they wish in dealing with the institution. In the laissez-faire stage, institutions tend to lack provisions for adult students. For instance, there is no active recruitment, no special support services, no curriculum development efforts especially for adults, and no faculty development efforts for dealing with adults.

During stage two, the separatist stage, institutions are faced with an increased enrollment of adult students. Adults are essentially segregated from the major student body and given separate specially developed programs, usually at different times and locations from the traditional student body and often with a lack of effective support services. Ackell (1982) suggests that these programs are also given a priority and status demonstrably lower than those of traditional programs. Adults become exploited economically and sometimes educationally as well. Fees are not adjusted, the services are weak, if available at all, and there is usually substantially less general fund support than that given to programs for younger students.

The third stage is the equity stage. During this stage, the institution actively recruits adult students, provides appropriate delivery systems for adult learning, offers a fully integrated curriculum, and uses fully integrated faculty. Degree credits for prior learning are offered and administrative services are made available by telephone, mail, during the evening, and on weekends. Academic advising, personal counseling, financial advising, career counseling, and other student support services are available in the evening. Senior policy-making bodies of the university are aware of adult students and administrative policy and practice is proactive rather than reactive in dealing with nontraditional student needs and problems (Ackell, 1982).

Chapter 3

PROCEDURES AND METHODOLOGY

The purpose of case study research is "to study intensively the background, current status, and environmental interactions of a given social unit: an individual, group, institution, or community" (Isaac, 1983:48). Because the major issues and research questions of this study focus on the who, the how, and the why, a case study was conducted to clarify these questions.

In order to address the major issues and research questions stated in Chapter 1, the following procedures were undertaken.

1. A comparison of the nontraditional Ferris student profile was made to the traditional Ferris student profile. The population consisted of all students enrolled in credit courses at Ferris State University on the fifth day of classes during the fall quarter of 1989.

The State of Michigan requires that all state universities submit a "snapshot" of enrollment data ten percent of the way through a term or semester (Michigan Bureau of Management and Budget, 1989). A Ferris term consists of fifty days. Thus, official state reports are composed of data obtained on the fifth day of each quarter. This study used student data as reported on the fifth day of classes during the fall quarter of 1989.

The student demographic data were obtained by downloading student files from official university student record data bases in ASCII format housed in the Office of Academic Affairs. The files were imported into a microcomputer-based data base manager, PC-File+ 5.0 on a Zenith 386 microcomputer with a 80 MB hard disk.

After the data needed for the student profile were imported into the data base manager PC-File+ 5.0, appropriate fields were selected and the reduced data set exported as a dBase III file. For more complex cross tabulations, the files were loaded into another microcomputer-based program, Reflex 2.0, which was used to create the appropriate data tabulations, make cross tabulations, and perform elementary statistical analyses. Lastly, Lotus 1-2-3, version 3.0 was used to create graphic presentations of the data.

The following demographic characteristics for nontraditional students were compared to those of the traditional students:

A. Demographic characteristics: Age, gender, race or ethnic background, home location as determined by zip code, full- or part-time enrollment, transfer credits

B. Previous academic performance: High school grades

C. Ability: ACT composite

D. Distribution in FSU programs

When the data are categorical, profiles are displayed in tables with counts and percentages. When the data are interval, profiles are displayed as means and standard deviations. It is expected that inferential analyses will not be appropriate for this study.

2. A review of the literature was conducted to identify what other postsecondary institutions in the United States are doing for adult learners. The review focused on demographic characteristics to discern what has worked with nontraditional students in the areas of recruitment and retention.

Building upon the classic works of adult educators such as Cross (1984) and Knowles (1980), a search of the last five years of literature was undertaken to identify and review research pertinent to the recruitment and retention of students aged twenty-five and older in postsecondary institutions. The search included works in Dialog, in Educational Resources Information Clearinghouse (ERIC), and in the Donnelley Demographic data bases. A manual search of the Thesaurus of Eric Descriptors, Resources in Education (RIE), and the Current Index to Journals in Education (CIJE) was completed to determine the best descriptors for this type of study. The descriptors used for this search included: nontraditional students, reentry students, adult students, higher education, postsecondary education, undergraduate study, demography, population trends, data collection, race, ACT, composite, geographic, location, gender, sex, grade, point, average, recruitment, admission, student recruitment, remedial instruction, remedial programs, and study skills.

3. A review of current FSU recruiting and retention activities for nontraditional students was made. A short questionnaire was mailed to the director of public relations, the registrar, the faculty advisor of the nontraditional student organization, the dean of enrollment services, the assistant dean of Gerholz Institute for Lifelong Learning, the director of the collegiate skills program, and the dean of the library.

The first question was closed-form to provide some structure and background to the study. The other three questions were open-form as this format "probably provides for greater depth of response" (Best, 1981:169). Because open-form items require greater effort on the part of the respondents, the Office of Academic Affairs mailed the questionnaire along with a cover letter to encourage return of the questionnaire. A copy of the questionnaire and the cover letter are found in Appendix C.

In addition, Ferris State University catalogs and brochures were reviewed to determine if these publications are adequately designed to meet the needs of the nontraditional student. A particular focus was given to reading level indexes, the inclusion of older students in photos, and recognition of adult student support services.

4. The Ferris nontraditional student demographic profile was compared to the nontraditional student demographic profile found in a review of the literature of educational institutions in the United States. The comparison attempted to determine the applicability of various recruiting and retention activities used by other institutions to the Ferris setting.

5. An action plan impacting procedures and policies affecting the recruitment and retention of nontraditional students at Ferris was developed and presented to the vice president of academic affairs. This plan stressed the significance of the study and identified needs of training, technology, and student services.

Chapter 4

PRESENTATION OF RESULTS

As the number of high school graduates decreases, Ferris State University (FSU) will increasingly complete with the other fourteen state universities, community colleges, and private schools for high school students. In an effort to maintain current enrollment levels, Ferris will actively recruit nontraditional students. Recognizing and adapting to the changes in the Ferris student population are of utmost importance to the university if administrators and faculty are to assess successfully the effects of this population on the institution's academic programs and fiscal health.

In order to serve the needs of nontraditional students at Ferris State University, and to develop an action plan impacting procedures and policies affecting the recruitment and retention of nontraditional students at Ferris State University, an analysis of the demographic and scholastic characteristic differences between the nontraditional student (those aged twenty-five and older) and the more traditional student (those younger than age twenty-five) cohort was made. Information was collected on variables that included: age, gender, race or ethnic background, home location as determined by zip code, full- or part-time enrollment, transfer credit, high school grade point average, ACT composite, and distribution in Ferris programs.

This study used enrollment data consisting of all students registered for credit courses at Ferris State University on the fifth day of classes during the fall quarter of 1989. The demographic data were obtained by downloading files from official university student record data bases in ASCII format. The files were imported into a microcomputer-based data base manager, PC-File+ 5.0. A reduced data set was exported as a dBase III file and then was analyzed using Reflex 2.0.

Close examination of some of the data presented in this chapter reveals that a few of the totals do not match. In some cases, the total number of students indicated is 11,871 as opposed to the true total of 11,878. The difference of seven is probably due to data entry error in the original student data files. It is argued that this discrepancy (.059 percent of total) had no significant effect on the results of this study.

Demographic Data

As shown in Figure 1, traditional students at Ferris State University during the fall quarter of 1989 totaled

9,577 students, 80.63 percent of the total student population. The nontraditional student enrollment was 2,301, 19.37 percent of the total student population.

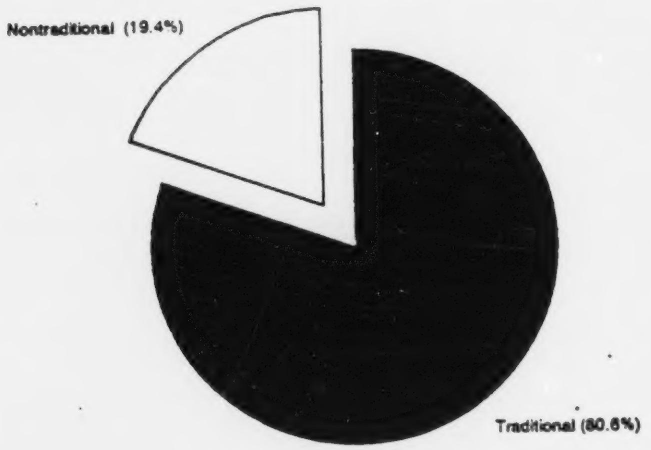

Figure 1

Distribution of 11,878 FSU Students Comparing Traditional and Nontraditional Student Enrollment

A review of the literature reveals a national trend of an increase in nontraditional student enrollment. In 1986, approximately sixty-one percent of the college students were under the age of twenty-five and about thirty-nine percent were twenty-five years or older (Parnell, 1989:3).

To further understand the characteristics of Ferris students, full-time and part-time enrollment trends were examined and are displayed in Table 1. Part-time students comprised 12.91 percent of the total student population. Whereas, national trends indicate that "nearly half of all public college students are classified as part-time students" (Parnell, 1989:3).

Table 1

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Full-Time and Part-Time Head Count Enrollment

Student	Traditional		Nontraditional		All	
Enrollment	Number	Percentage	Number	Percentage	Number	Percentage
Full-Time	9,085	94.86	1,260	54.76	10,345	87.09
Part-Time	492	5.14	1,041	45.24	1,533	12.91
TOTAL	9,577	100.00	2,301	100.00	11,878	100.00

Nationally, in 1985 students eighteen to twenty-four years old represented twenty-two percent of the part-time enrollments. The same study indicates that part-time students aged twenty-five and older represent eighty-one percent of the total student population (Ottinger, 1989:45). At Ferris State University, part-time students younger than the age of twenty-five account for 4.14 percent of the total student population while part-time students aged twenty-five and older made up 8.76 percent of the total student population.

Of the FSU traditional student population, 492 students or 5.14 percent of the traditional students were enrolled part-time. Of the nontraditional student population, 1,041 students or 45.24 percent of the nontraditional students were enrolled part-time. Eighteen times as many traditional students were enrolled full-time as opposed to part-time students. The nontraditional students were almost evenly divided between full-time and part-time enrollment.

The data in Table 2 indicate that male enrollment at Ferris State University totaled 7,005, nearly fifty-nine percent (58.98%) of the total student population. However, at a national level, female enrollments accounted for fifty-three percent of the total student population in 1987 (Gilley, 1989:33). At Ferris, males dominated both the traditional (60.11%) and nontraditional (54.24%) student groups.

Table 2

Counts and Percentages Comparing All FSU Traditional and Nontraditional Students by Gender

Student Gender	Traditional Number	Traditional Percentage	Nontraditional Number	Nontraditional Percentage	All Students Number	All Students Percentage
Female	3,820	39.89	1,053	45.76	4,873	41.03
Male	5,757	60.11	1,248	54.24	7,005	58.98
TOTAL	9,577	100.00	2,301	100.00	11,878	100.01

A review of the literature revealed that "in all adult education courses, participation reversed from a fifty-two percent male majority in 1969 to a fifty-five percent female majority in 1984" (Rachal, 1989:9). Nontraditional females represented 45.76 percent of the nontraditional student population at Ferris and 8.87 percent of the total student population. Nontraditional males comprised 10.50 percent of the total student population.

The data in Table 3 indicate that the majority of the students enrolled full-time at Ferris State University were male. Of the traditional FSU student population, nearly sixty percent (59.92%) of the full-time students were male. Of the nontraditional student population, over sixty-two percent (62.38%) of the full-time students were male.

Table 3

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Gender and Full-Time Enrollment

	Full-Time Enrollment					
	Traditional		Nontraditional		All Full-Time Students	
Gender	Number	Percentage	Number	Percentage	Number	Percentage
Female	3,641	40.08	474	37.62	4,115	39.78
Male	5,444	59.92	786	62.38	6,230	60.22
TOTAL	9,085	100.00	1,260	100.00	10,345	100.00

Of the traditional part-time FSU student population tabulated in Table 4, over sixty-three percent (63.62%) of the traditional students were male. This trend is reversed in the nontraditional student population where over fifty-five percent (55.62%) of the nontraditional students were female. For the total student part-time enrollment, males (50.56%) essentially equalled females (49.45%).

Table 4

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Gender and Part-Time Enrollment

	Part-Time Enrollment					
	Traditional		Nontraditional		All Part-Time Students	
Gender	Number	Percentage	Number	Percentage	Number	Percentage
Female	179	36.38	579	55.62	758	49.45
Male	313	63.62	462	44.38	775	50.56
TOTAL	492	100.00	1,041	100.00	1,533	100.01

The data in Table 5 indicate that the largest age group at Ferris State University were the twenty- to twenty-five-year olds with 5,383 students enrolled, about fifty-six percent (56.21%) of the traditional student population. The second largest age group was the fifteen- to twenty-year olds with 4,194 students, about forty-three percent (43.79%) of the traditional student population.

Over fifty-two percent (52.18%) of the nontraditional students were twenty-five to thirty years old.

Table 5

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Gender and Age

Age Distribution	Male		Female		All Students	
	Number	Percentage	Number	Percentage	Number	Percentage
Age 15 to 20	2,346	40.00	1,848	48.38	4,194	35.33
Age 20 to 25	3,411	59.25	1,972	51.62	5,383	45.35
Age 25 to 30	747	59.85	450	42.73	1,197	10.08
Age 30 to 35	195	15.63	185	17.57	380	3.20
Age 35 to 40	146	11.70	175	16.62	321	2.70
Age 40 to 45	85	6.81	137	13.01	222	1.87
Age 45 to 50	32	2.56	65	6.17	97	.82
Age 50 to 55	20	1.60	27	2.56	47	.40
Age 55 to 60	13	1.04	8	.76	21	.18
Age 60 to 65	4	.32	2	.19	6	.05
Age 65 to 70	2	.16	0	0.00	2	.02
Age 70 to 75	0	0.00	1	.09	1	.01
TOTAL	7,001	58.98	4,870	41.02	11,871	100.00

Nontraditional student enrollment declined with each successive five-year age span. A similar finding was observed in a national study conducted by The College Board (Aslanian: 1988, 16).

The data in Table 5 indicate that in both traditional student categories (age fifteen to twenty and age twenty to twenty-five), males outnumbered females by about eight percent. In fact, males outnumbered females in all age categories except those falling between the ages of forty and fifty-five.

Nationally, more nontraditional female students were enrolled than nontraditional male students (Aslanian, 1988: 18). At Ferris, 45.76 percent of the nontraditional student population were female and 54.24 percent of the population were male.

In a study conducted on six campuses of the Wisconsin system, Sewall noted that seventy-five percent of the nontraditional students were female (1986:4). Of the nontraditional students in this same age category at Ferris, sixty percent were female.

The 1980 census for Big Rapids, Michigan (the location of Ferris State University) as indicated in the Donnelley Demographic Data Base (1990:1) shows that 23.89 percent (3,431) of the total Big Rapids population was between the ages of twenty-five and seventy-five. The 1989 estimate for the same age group was 40.92 percent (5,417) of the total Big Rapids population. The 1994 projection for the twenty-five to seventy-five year age category is 41.29

percent (5,345) of the total population. These numbers indicate that the percentage of the population between the ages of twenty-five and seventy-five is expected to increase while the total population is expected to decline. The total population in Big Rapids for 1980 was 14,361. The estimated population for 1989 was 13,239 and the projected population for 1994 is 12,947.

The 1980 census for Big Rapids as indicated in the Donnelley Demographic Data Base (1990:1) shows that 48.03% percent (1,648) of the Big Rapids population between the ages of twenty-five and seventy-five were male. The 1989 estimate for males of the same age group was 50.77 percent (2,750) of the twenty-five to seventy-five year olds. The 1994 projection for the male population between the ages of twenty-five to seventy-five years is 50.67 percent (2,709) of that age category.

Grand Rapids is sixty-five miles south of Big Rapids and is the closest urban area to Ferris State University. The 1980 census data for Grand Rapids as indicated in the Donnelley Demographic Data Base (1990:1) reveal that the total population for Grand Rapids is expected to increase. In 1980, the total population in Grand Rapids was 181,843. The estimated population for 1989 was 187,939 and the projected population for 1994 is 191,488. This data base shows that in 1980, 50.10% (91,112) of the total Grand Rapids population was between the ages of twenty-five and seventy-five. The 1989 estimate for the same age group was 54.67% (102,738) of the total Grand Rapids population. The 1994 projection for the twenty-five to seventy-five year age category is 53.53% (102,483) of the total population.

The 1980 census for Grand Rapids as indicated in the Donnelley Demographic Data Base (1990:1) shows that 46.60% percent (42,462) of the Grand Rapids population between the ages of twenty-five and seventy-five were male. The 1989 estimate for males of the same age group was 47.19 percent (48,478) of the twenty-five to seventy-five year olds. The 1994 projection for the male population between the ages of twenty-five to seventy-five years is 47.88 percent (49,068) of that age category.

The national study conducted by The College Board indicates that of the adult students about sixty percent were married (Aslanian, 1988:20). As shown in Table 6, at Ferris 35.25 percent of the nontraditional students were married. Only 1.35 percent of the Ferris traditional student population were married.

As shown in Table 7, white students comprised about ninety-two percent of both the traditional (92.20%) and nontraditional (91.87%) student populations. The national study conducted by The College Board indicated that eighty-eight percent of the American nontraditional student population was white (Aslanian, 1988:23).

Table 6

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Marital Status

Marital Status	Traditional Number	Traditional Percentage	Nontraditional Number	Nontraditional Percentage	All Number	All Percentage
Married	129	1.35	811	35.25	940	7.91
Single	9,446	98.63	1,490	64.75	10,936	92.07
Unknown	2	.02	0	0.00	2	.02
TOTAL	9,577	100.00	2,301	100.00	11,878	100.00

The percentage of traditional black students (5.01%) was nearly double the enrollment of nontraditional black students (2.45%). The other ethnic groups had roughly the same representation in the traditional and nontraditional categories.

The 1980 census for Big Rapids, Michigan as indicated in the Donnelley Demographic Data Base (1990:1) shows that 95.1 percent (13,661) of the total Big Rapids population was white. The 1989 estimate for the white population was 92.8 percent (12,287) of the total Big Rapids population. The 1994 projection for the white population is 91.4 percent (11,830) of the total population.

The 1980 census for Grand Rapids, Michigan as indicated in the Donnelley Demographic Data Base (1990:1) indicates that 80.9 percent (147,171) of the total Grand Rapids population was white. The 1989 estimate for the white population was 77.8 percent (146,205) of the total Grand Rapids population. The 1994 projection for the white population is 75.53 percent (144,626) of the total population.

Table 7

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Ethnicity

Ethnicity	Traditional		Nontraditional		All Students	
	Number	Percentage	Number	Percentage	Number	Percentage
Black	480	5.01	57	2.45	537	4.52
Indian	37	.39	8	.35	45	.38
Oriental/Asian Pacific Islander	44	.46	15	.65	59	.50
Hispanic	79	.82	13	.57	92	.77
White	8,830	92.20	2,114	91.87	10,944	92.14
Undeclared	107	1.12	94	4.09	201	1.69
TOTAL	9,577	100.00	2,301	100.00	11,878	100.00

The data in Table 8 indicate that ninety-two percent of the full-time traditional student population at Ferris were white. This percentage slightly decreased to eighty-eight percent for the full-time nontraditional white population. As for the total student body, full-time enrollment for traditional black students was nearly double full-time enrollment for nontraditional black students.

Table 8

Counts and Percentages Comparing FSU Full-Time Traditional and Nontraditional Students by Ethnicity

Ethnicity	Full-Time Traditional Number	Full-Time Traditional Percentage	Full-Time Nontraditional Number	Full-Time Nontraditional Percentage	All Students Number	All Students Percentage
Black	469	5.16	34	2.70	503	4.86
Indian	34	.37	5	.40	39	.38
Oriental/Asian Pacific Islander	44	.48	14	1.11	58	.56
Hispanic	76	.84	11	.87	87	.84
White	8,358	92.00	1,109	88.02	9,467	91.51
Undeclared	104	1.14	87	6.90	191	1.85
TOTAL	9,085	100.00	1,260	100.00	10,345	100.00

Of the part-time students tallied in Table 9, about ninety-six percent were white in both the traditional (95.94%) and nontraditional (96.54%) student categories. Unlike the full-time enrollment numbers, blacks were nearly evenly represented in the traditional (2.24%) and nontraditional (2.21%) student groups.

Table 9

Counts and Percentages Comparing FSU Part-Time Traditional and Nontraditional Students by Ethnicity

Ethnicity	Part-Time Traditional Number	Part-Time Traditional Percentage	Part-Time Nontraditional Number	Part-Time Nontraditional Percentage	All Students Number	All Students Percentage
Black	11	2.24	23	2.21	34	2.22
Indian	3	.61	3	.29	6	.39
Oriental/Asian Pacific Islander	0	0.00	1	.10	1	.07
Hispanic	3	.61	2	.19	5	.33
White	472	95.94	1,005	96.54	1,477	96.35
Undeclared	3	.61	7	.67	10	.65
TOTAL	492	100.01	1,041	100.00	1,533	100.01

On a Ferris State University application form, a student is requested to list a local address and a permanent address. The data in Table 10 were obtained by grouping permanent address zip codes. The zip code groupings are those used by the U.S. Postal Service (National Information Data Center, 1990) and are displayed in Figure 2. Big Rapids has a zip code of 49307 and is located centrally within the Grand Rapids three-digit zip code area.

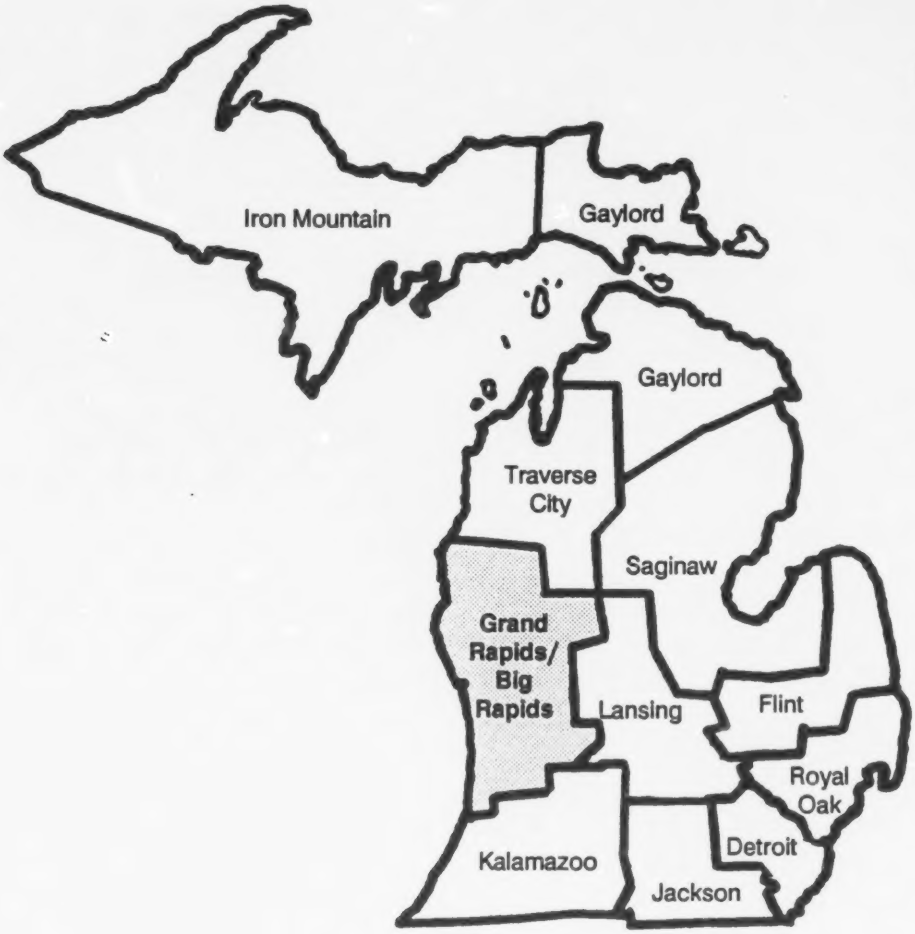

Figure 2

Three-Digit Zip Code Map of Michigan from the National Information Data Center, 1990

The data in Table 10 indicate that of the total FSU student population, 3.45 percent came from outside Michigan. The zip code areas of the southeastern corner of Michigan comprised of the Royal Oak, Detroit, and Flint areas supplied 31.12% of the total student population. Of the traditional students, 34.83% came from these three areas and of the nontraditional students, 15.65% were from the same geographic location. Over forty-four percent (44.76%) of the nontraditional students were from the Grand Rapids/Big Rapids zip code area whereas 21.27 percent of the traditional students were from the same geographic location.

Table 10

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Home Location

Home Location	Traditional		Nontraditional		All Students	
	Number	Percentage	Number	Percentage	Number	Percentage
Outside Michigan	319	3.33	91	3.95	410	3.45
Royal Oak	1,432	14.95	144	6.26	1,576	13.27
Detroit	1,109	11.58	94	4.09	1,203	10.13
Flint	795	8.30	122	5.30	917	7.72
Saginaw	1,079	11.27	122	5.30	1,201	10.11
Lansing	846	8.83	122	5.30	968	8.14
Kalamazoo	651	6.80	109	4.74	760	6.40
Jackson	272	2.84	43	1.87	315	2.65
Grand Rapids/ Big Rapids	2,037	21.27	1,030	44.76	3,067	25.82
Traverse City	507	5.29	351	15.25	858	7.22
Gaylord	282	2.94	52	2.26	334	2.81
Iron Mountain	248	2.59	21	0.91	269	2.26
Total	9,577	100.00	2,301	99.99	11,878	100.00

In a study conducted at the University of Southern Mississippi on data collected from 1,024 adult learners (between the ages of twenty-one and fifty-nine), "it was found that 780 (76%) individuals were living within thirty miles of the university" (Wagner, 1989:84). Within this same group, "individuals who lived more than thirty miles from campus were younger than those living closer" (Wagner, 1989:84). The College Board study found that "adults spend very little time traveling to class. Half of them can get there in less than twenty minutes. Most of the rest can get there in less than forty-five minutes. One hour is the extreme upper limit" (Aslanian, 1988:82).

The data in Table 11 indicate that 68.51 percent of the total student population do not transfer credit hours from other institutions to Ferris. This trend is reversed, however, with the nontraditional student populace. Of the full-time nontraditional students, 71.51 percent transfer in credit hours and of the part-time nontraditional students, 53.12 percent transfer in credit hours.

A total of 1,454 nontraditional students or 63.19 percent of the nontraditional student population transferred in credit hours. This is contrasted to national findings where thirty-seven percent of the adult student population transferred credits from one institution toward a degree at another (Aslanian, 1988:47).

Table 11

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Enrollment Status and Transfer Credits

Transfer Credits	Full-Time				Part-Time				All Students	
	Traditional		Nontraditional		Traditional		NonTraditional			
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	2,132	23.47	901	71.51	154	31.30	553	53.12	3,740	31.49
No	6,953	76.53	359	28.49	338	68.70	488	46.88	8,138	68.51
TOTAL	9,085	100.00	1,260	100.00	492	100.00	1,041	100.00	11,878	100.00

"Older students often demonstrated lower high school grade point averages than traditional age students" (Bean, 1985:496). The data in Table 12 support this trend to some extent. A higher percentage of full-time (13.33%) and part-time (16.28%) nontraditional students had high school grade point averages below 2.00 than full-time (9.57%) and part-time (12.59%) traditional students.

The data in Table 13 indicate that whether traditional or nontraditional, full-time or part-time, Ferris students had similar means for high school grade point averages. The means ranged from 2.61 for the part-time nontraditional students to 2.65 for the full-time traditional students.

Ethnicity had relatively no effect on mean high school grade point averages for the various Ferris student groups. The figures in Table 14 show means ranging from 2.27 for nontraditional black students to 2.99 for nontraditional Oriental/Asian Pacific Islander students. For the traditional students, the low mean was 2.38 for the black students and 2.78 for the Oriental/Asian Pacific Islander students. The mean high school grade point average for traditional white students was 2.66 and 2.64 for nontraditional white students.

Table 12

Counts and Percentages Comparing FSU Traditional and Nontraditional Students
Students by Enrollment Status and High School Grade Point Average Ranges

	Full-Time				Part-Time				All Students	
	Traditional		Nontraditional		Traditional		NonTraditional			
High School G.P.A. Range	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
0.00 - 0.67	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
0.67 - 1.34	7	0.10	0	0.00	0	0.00	1	2.33	8	.11
1.34 - 2.01	672	9.47	24	13.33	37	12.59	6	13.95	739	9.71
2.01 - 2.68	3,410	48.07	77	42.78	127	43.20	18	41.86	3,632	47.72
2.68 - 3.35	2,175	30.66	58	32.22	105	35.71	14	32.56	2,352	30.90
3.35 - 4.00	828	11.67	21	11.67	24	8.16	4	9.30	877	11.52
TOTAL	7,094	99.97	180	100.00	294	99.66	43	100.00	7,611	99.96

Note. High school grade point average was available for 7,611 of the 11,878 students.

Table 13

Counts, Means, and Standard Deviations of High School Grade Point Average Comparing FSU Traditional and Nontraditional Students by Enrollment Status

	High School Grade Point Average								
Enrollment	Traditional			Nontraditional			All Students		
Status	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
Full-Time	7,094	2.65	0.52	180	2.63	0.54	7,274	2.65	0.52
Part-Time	294	2.62	0.53	43	2.61	0.59	337	2.62	0.54
Total	7,388	2.64	0.52	223	2.63	0.55	7,611	2.64	0.52

Note. High school grade point average was available for 7,611 of the 11,878 students.

Table 14

Counts, Means, and Standard Deviations of High School Grade Point Average Comparing FSU Traditional and Nontraditional Students by Ethnicity

	High School Grade Point Average								
	Traditional			Nontraditional			All Students		
Ethnicity	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
Black	392	2.38	0.42	9	2.27	0.41	401	2.38	0.41
Indian	33	2.53	0.41	1	2.74	0.00	34	2.54	0.40
Oriental/Asian Pacific Islander	31	2.78	0.57	1	2.99	0.00	32	2.79	0.56
Hispanic	61	2.49	0.45	1	2.32	1.93	62	2.49	0.44
White	6,869	2.66	0.53	211	2.64	0.55	7,080	2.66	0.53
Undeclared	2	2.65	0.25	0	--	--	2	2.65	0.25
Total	7,388	2.64	0.52	223	2.63	0.55	7,611	2.64	0.52

Note. High school grade point average was available for 7,611 of the 11,878 students.

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The data in Table 15 indicate that a higher percentage of full-time nontraditional students had an ACT composite score in the 0 to 7 (3.56%) and 7 to 14 (31.45%) range than did the full-time traditional students (1.18%), 27.94%). This trend was reversed with the part-time student population. Of the part-time nontraditional students, 1.2% were in the 0 to 7 ACT range and 24.10% were in the 7 to 14 range. Of the part-time traditional students, 1.91% were in the 0 to 7 range and 27.79% were in the 7 to 14 range.

In Table 16, a low mean of 16.2 is shown for full-time nontraditional students and the high mean of 17.2 is shown for part-time nontraditional students. The full-time traditional students had a mean ACT composite score of 16.5 while the part-time traditional students had a mean ACT of 16.6.

The figures in Table 17 show the lowest mean ACT composite for both the traditional (11.1) and nontraditional students (9.1) to be in the black ethnic category. The mean ACT composite score for the white traditional student was 16.8 and for the white nontraditional student the ACT mean was 16.7. The counts for the remaining ethnic categories totaled 1.63% of the 8,917 students.

Table 15

Counts and Percentages of ACT Composite Ranges Comparing FSU Traditional and Nontraditional Students by Enrollment Status

ACT Composite Range	Full-Time				Part-Time				All Students	
	Traditional		Nontraditional		Traditional		NonTraditional			
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
0 to 7	93	1.18	17	3.56	7	1.91	2	1.20	119	1.33
7 to 14	2,209	27.94	150	31.45	102	27.79	40	24.10	2,501	28.05
14 to 21	3,875	49.00	204	42.77	166	45.23	80	48.19	4,325	48.50
21 to 28	1,672	21.15	98	20.55	89	24.25	41	24.70	1,900	21.31
28 to 35	58	0.73	8	1.68	3	0.82	3	1.81	72	0.81
TOTAL	7,097	100.00	477	100.00	367	100.00	166	100.00	8,917	100.00

Note. ACT composite score was available for 8,917 of the 11,878 students.

Table 16

Counts, Means, and Standard Deviations of ACT Composite Scores Comparing FSU Traditional and Nontraditional Students by Enrollment Status

Enrollment Status	ACT Composite Score								
	Traditional			Nontraditional			All Students		
	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
Full-Time	7,907	16.5	4.87	477	16.2	5.53	8,384	16.5	4.91
Part-Time	367	16.6	5.14	166	17.2	4.98	533	16.8	5.10
Total	8,274	16.5	4.89	643	16.4	5.41	8,917	16.5	4.93

Note. ACT composite score was available for 8,917 of the 11,878 students.

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Table 17

Counts, Means, and Standard Deviations of ACT Composite Scores Comparing FSU Traditional and Nontraditional Students by Ethnicity

					ACT Composite Score				
	Traditional			Nontraditional			All Students		
Ethnicity	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
Black	415	11.1	3.85	12	9.1	4.23	427	11.0	3.88
Indian	32	14.9	5.03	3	13.7	2.62	35	14.8	4.88
Oriental/Asian Pacific Islander	33	14.1	4.56	3	14.3	4.50	36	14.1	4.56
Hispanic	72	14.0	4.93	2	17.5	0.50	74	14.1	4.90
White	7,705	16.8	4.75	615	16.7	5.25	8,320	16.8	4.79
Undeclared	17	18.2	6.07	8	6.6	3.24	25	14.5	7.58
Total	8,274	16.5	4.89	643	16.4	5.41	8,917	16.5	4.93

Note. ACT composite score was available for 8,917 of the 11,878 students.

Of the full-time traditional student population indicated in Table 18, 44.81% had a Ferris cumulative grade point average of 2.68 or higher. For full-time nontraditional students, 65.25% had a Ferris cumulative grade point average of 2.68 or higher. This trend continued in the part-time student population. A larger percentage of part-time nontraditional students (79.97%) than part-time traditional students (42.96%) had a FSU cumulative grade point average of 2.68 or higher.

The figures in Table 19 indicate that nontraditional students had a higher mean FSU cumulative grade point average than did the traditional students. The full-time nontraditional students had a mean FSU grade point average of 2.92 and the part-time nontraditional students had a mean of 3.22. Whereas, the full-time traditional students had a mean FSU grade point average of 2.65 and the part-time traditional students had a mean of 2.58.

Table 20 shows a comparison of traditional and nontraditional students by FSU cumulative grade point average and ethnicity. The black ethnic group had the lowest mean FSU grade point average of 2.25 and the white ethnic group had the highest mean of 2.66. This trend was also found in the nontraditional student category. The low mean for the nontraditional student was 2.42 for the black ethnic group and the high mean was 3.07 for the white.

Table 18

Counts and Percentages of FSU Cumulative Grade Point Average Ranges Comparing
FSU Traditional and Nontraditional Students by Enrollment Status

	Full-Time				Part-Time				All	
FSU Cumulative	Traditional		Nontraditional		Traditional		NonTraditional		Students	
G.P.A. Range	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
0.00 - 0.67	3	0.05	0	0.00	2	0.49	1	0.13	6	0.08
0.67 - 1.34	21	0.37	2	0.19	3	0.73	6	0.77	32	.40
1.34 - 2.01	490	8.55	55	5.11	65	15.78	16	2.05	626	7.83
2.01 - 2.68	2,650	46.22	317	29.46	165	40.05	133	17.07	3,265	40.81
2.68 - 3.35	1,946	33.94	431	40.06	133	32.28	244	31.32	2,754	34.42
3.35 - 4.00	623	10.87	271	25.19	44	10.68	379	48.65	1,317	16.46
TOTAL	5,733	100.00	1,076	100.01	412	100.01	779	99.99	8,000	100.00

Note. Ferris cumulative grade point average was available for 8,000 of the 11,878 students. The FSU cumulative grade point average is not available on the fifth day of fall quarter for the 3,878 entering students.

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Table 19

Counts, Means, and Standard Deviations of FSU Cumulative Grade Point Average Comparing
FSU Traditional and Nontraditional Students by Enrollment Status

	FSU Cumulative Grade Point Average								
Enrollment		Traditional			Nontraditional			All Students	
Status	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
Full-Time	5,733	2.65	0.52	1,076	2.92	0.58	6,809	2.69	0.53
Part-Time	412	2.58	0.57	779	3.22	0.61	1,191	3.00	0.67
Total	6,145	2.65	0.52	1,855	3.04	0.61	8,000	2.74	0.57

Note. Ferris cumulative grade point average was available for 8,000 of the 11,878 students. The FSU cumulative grade point average is not available on the fifth day of fall quarter for the 3,878 entering students.

Table 20

Counts, Means, and Standard Deviations of FSU Cumulative Grade Point Average Comparing FSU Traditional and Nontraditional Students by Ethnicity

	FSU Cumulative Grade Point Average								
	Traditional			Nontraditional			All Students		
Ethnicity	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
Black	254	2.25	0.46	42	2.42	0.56	296	2.27	0.48
Indian	15	2.46	0.38	5	2.64	0.68	20	2.50	0.48
Oriental/Asian Pacific Islander	25	2.63	0.50	15	2.72	0.63	40	2.66	0.55
Hispanic	45	2.39	0.44	9	2.68	0.53	54	2.44	0.47
White	5,730	2.66	0.52	1,716	3.07	0.60	7,446	2.75	0.56
Undeclared	76	3.00	0.54	68	2.87	0.53	144	2.94	0.54
Total	6,145	2.65	0.52	1,855	3.04	0.61	8,000	2.74	0.57

Note. Ferris cumulative grade point average was available for 8,000 of the 11,878 students. The FSU cumulative grade point average is not available of the fifth day of fall quarter for the 3,878 entering students.

The data in Table 21 indicate total enrollment count for each of the Ferris schools. For all students, the School of Business had the largest total enrollment of 2,209 students. This school was followed in size by the School of Arts and Sciences (2,471), the School of Technology (2,209), the School of Education (1,255), the School of Allied Health (968), the School of Pharmacy (380), and the College of Optometry (297).

Enrollment figures in each of the schools for traditional students and nontraditional students within the same enrollment status categories were within eleven percentage points with two exceptions. Of the part-time traditional students, 52.64% were enrolled in the School of Business as contrasted wtih 29.68% of the part-time nontraditional students enrolled in that school. Of the part-time traditional students, 5.69% were enrolled in the School of Allied Health as contrasted with 23.25% of the part-time nontraditional students who were enrolled in that school.

In a national study undertaken by The College Board, about forty-five percent of the courses taken by adults are concentrated in four career fields: business, computer science and/or information science, education and health and about seventy percent of the courses taken by adults are in career fields (Alsanian, 1988:60). The ranking of

Table 21

Counts and Percentages Comparing FSU Traditional and Nontraditional Students by Enrollment Status and FSU School

	Full-Time				Part-Time				All Students	
	Traditional		Nontraditional		Traditional		NonTraditional			
Ferris School	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Technology	1,841	20.26	252	20.00	60	12.20	56	5.38	2,209	18.60
Business	3,368	37.07	362	28.73	259	52.64	309	29.68	4,298	36.19
Arts & Sciences	2,002	22.04	170	13.49	113	22.97	186	17.87	2,471	20.80
Pharmacy	264	2.91	107	8.49	3	0.61	6	0.58	380	3.20
Education	952	10.48	151	11.98	27	5.49	125	12.01	1,255	10.57
Allied Health	555	6.11	143	11.35	28	5.69	242	23.25	968	8.15
Optometry	103	1.13	75	5.95	2	0.41	117	11.24	297	2.50
TOTAL	9,085	100.00	1,260	99.99	492	100.01	1,041	100.01	11,878	100.01

Note. High school grade point average was available for 7,611 of the 11,878 students.

schools in Table 21 indicate that nontraditional students at Ferris followed this trend. At Ferris, computer science and/or information science is within the School of Business. The total number of nontraditional students enrolled in business, education, and allied health was 1,332 (57.89%). When including nontraditional students enrolled in pharmacy and optometry the total number of students was 1,637 (71.14%).

The school enrollment rankings as displayed in Table 22 indicate similar patterns for the full-time traditional student, full-time nontraditional student, part-time traditional student, and all students. For the part-time nontraditional student, enrollment ranking for the School of Allied Health (ranked second) was much higher and the enrollment ranking for the School of Technology (ranked sixth) was much lower than in the other four enrollment status groupings.

Printouts of head counts and percentages of the total student population, full-time student population, and part-time student population for individual FSU programs are found in Appendix D of this document. The programs are listed alphabetically for the entire institution. Certificate, two-year, four-year, and graduate degree programs are indicated.

Table 22

Rank Order of Enrollment Counts by FSU Schools from High to Low Comparing FSU Traditional Students and Nontraditional Students by Enrollment Status

School	Full-Time		Part-Time		All
Rank	Traditional	Nontraditional	Traditional	NonTraditional	Students
1	Business	Business	Business	Business	Business
2	Arts & Sciences	Technology	Arts & Sciences	Allied Health	Arts & Sciences
3	Technology	Arts & Sciences	Technology	Arts & Sciences	Technology
4	Education	Education	Allied Health	Education	Education
5	Allied Health	Allied Health	Education	Optometry	Allied Health
6	Pharmacy	Pharmacy	Pharmacy	Technology	Pharmacy
7	Optometry	Optometry	Optometry	Pharmacy	Optometry

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The data in Table 23 indicate that traditional and nontraditional students enrolled in each of the seven Ferris schools had similar mean high school grade point averages. For traditional students, the high mean of 3.40 was in the School of Pharmacy and the low mean of 2.54 was in the School of Arts and Sciences. For the nontraditional students, the high mean of 3.46 was in the School of Pharmacy and the low mean of 2.44 was in the School of Arts and Sciences.

When comparing ACT mean composite scores, the figures in Table 24 indicate that the highest mean for the traditional students was 22.3 for the School of Pharmacy and the lowest ACT mean for traditional students was 15.9 for the School of Education. For the nontraditional students, the highest ACT mean was 22.4 for the College of Optometry and the lowest ACT mean for nontraditional students was 15.6 for the School of Business.

Table 25 is included to show total counts for each of the ethnic categories represented in Table 26 and Table 27. The figures in Table 26 indicate similar mean ACT composite scores for white traditional and nontraditional students in each school. For minority students this similarity does not exist. However, this phenomena most likely is due to low head count figures as shown in Table 25.

Table 23

Counts, Means, and Standard Deviations of High School Grade Point Average Comparing FSU Traditional and Nontraditional Students by FSU Schools

FSU School	High School Grade Point Average								
	Traditional			Nontraditional			All Students		
	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
Technology	1,466	2.64	0.47	41	2.54	0.47	1,507	2.64	0.47
Business	2,817	2.64	0.47	91	2.59	0.47	2,908	2.64	0.47
Arts & Sciences	1,743	2.54	0.59	28	2.44	0.65	1,771	2.54	0.59
Pharmacy	126	3.40	0.43	4	3.46	0.21	130	3.40	0.42
Education	768	2.58	0.46	29	2.59	0.51	797	2.58	0.46
Allied Health	408	2.93	0.53	17	2.65	0.51	425	2.92	0.53
Optometry	60	3.16	0.58	13	3.41	0.33	73	3.20	0.56
TOTAL	7,388	2.64	0.52	223	2.63	0.55	7,611	2.64	0.52

Note. High school grade point average was available for 7,611 of the 11,878 students.

Table 24

Counts, Means, and Standard Deviations of ACT Composite Scores Comparing FSU Traditional and Nontraditional Students by FSU Schools

FSU Schools	Traditional Number	Traditional Mean	Traditional Standard Deviation	Nontraditional Number	Nontraditional Mean	Nontraditional Standard Deviation	All Students Number	All Students Mean	All Students Standard Deviation
Technology	1,660	16.3	4.61	119	16.6	5.63	1,779	16.4	4.69
Business	3,153	16.4	4.60	225	15.6	5.19	3,378	16.4	4.64
Arts & Sciences	1,882	16.1	5.36	107	16.1	5.18	1,989	16.1	5.35
Pharmacy	173	22.3	3.74	18	19.9	4.15	191	22.1	3.85
Education	856	15.9	4.77	67	16.5	5.21	923	16.0	4.80
Allied Health	479	17.4	4.63	91	16.8	5.35	570	17.3	4.76
Optometry	71	19.7	4.94	16	22.4	5.40	87	20.2	5.14
TOTAL	8,274	16.5	4.89	643	16.4	5.41	8,917	16.5	4.93

Note. ACT composite score was available for 8,917 of the 11,878 students.

Table 25

Counts on ACT Composite Scores Comparing FSU Traditional and Nontraditional Students by Ethnicity and FSU Schools

FSU School	Black		Indian		Oriental/Asian Pacific Islander		Hispanic		White		Undeclared		All Students	
	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.
Technology	30	1	10	0	8	0	9	1	1,603	116	0	1	1,660	119
Business	144	6	13	1	6	3	24	1	2,955	208	11	6	3,153	225
Arts & Sciences	195	3	5	1	12	0	23	0	1,644	103	3	0	1,882	107
Pharmacy	1	0	0	0	1	0	1	0	169	18	1	0	173	18
Education	32	1	3	1	0	0	9	0	811	65	1	0	856	67
Allied Health	12	1	1	0	5	0	6	0	454	89	1	1	479	91
Optometry	1	0	0	0	1	0	0	0	69	16	0	0	71	16
TOTAL	415	12	32	3	33	3	72	2	7,705	615	17	8	8,274	643

Note. ACT composite score was available for 8,917 of the 11,878 students.

Table 26

Means of ACT Composite Scores Comparing FSU Traditional and Nontraditional Students by Ethnicity and FSU Schools

FSU School	Black		Indian		Oriental/Asian Pacific Islander		Hispanic		White		Undeclared		All Students	
	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.
Technology	11.6	6.0	16.4	--	13.3	--	12.3	18.0	16.5	16.8	--	3.0	16.3	16.6
Business	11.2	9.7	13.3	16.0	13.7	14.3	15.0	17.0	16.7	16.1	20.0	7.7	16.4	15.6
Arts & Sciences	10.6	10.7	15.2	10.0	15.5	--	13.7	--	16.8	16.4	11.3	--	16.1	16.1
Pharmacy	15.0	--	--	--	19.0	--	28.0	--	22.3	19.9	20.0	--	22.3	19.9
Education	12.6	8.0	16.7	15.0	--	--	11.4	--	16.1	16.6	19.0	--	15.9	16.5
Allied Health	12.2	5.0	13.0	--	12.8	--	14.8	--	17.7	17.1	16.0	4	17.4	16.8
Optometry	9.0	--	--	--	9	--	--	--	20.0	22.4	--	--	19.7	22.4
TOTAL	11.1	9.1	14.9	13.7	14.1	14.3	14.0	17.5	16.8	16.7	18.2	6.6	16.5	16.4

Note. ACT composite score was available for 8,917 of the 11,878 students.

Table 27

Standard Deviation of ACT Composite Scores Comparing FSU Traditional and
Nontraditional Students by Ethnicity and FSU Schools

FSU School	Black		Indian		Oriental/Asian Pacific Islander		Hispanic		White		Undeclared		All Students	
	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.	Trad.	Nontrad.
Technology	3.85	0	5.46	--	5.04	--	3.13	0	4.56	5.47	--	0	4.61	5.63
Business	3.45	5.12	4.98	0	4.85	4.5	4.62	0	4.47	4.97	6.18	3.09	4.60	5.19
Arts & Sciences	3.79	2.62	4.53	0	3.99	--	5.36	--	5.14	5.13	2.62	--	5.36	5.18
Pharmacy	0	--	--	--	0	--	0	--	3.71	4.15	0	--	3.74	4.15
Education	4.91	0	2.36	0	--	--	2.95	--	4.72	5.18	0	--	4.77	5.21
Allied Health	4.78	--	0	--	3.54	--	4.02	--	4.52	5.08	0	0	4.63	5.35
Optometry	0	--	--	--	0	--	--	--	4.66	5.40	--	--	4.94	5.40
TOTAL	3.85	4.23	5.03	2.62	4.56	4.5	4.93	0.5	4.75	5.25	6.07	3.24	4.89	5.41

Note. ACT composite score was available for 8,917 of the 11,878 students.

Results of Questionnaire

On May 24, 1990 a questionnaire (Appendix C) was mailed to seven Ferris academic and administrative staff members to assess their perceptions of current recruiting and retention activities for nontraditional students at Ferris State University. By June 11, 1990, all seven questionnaires had been completed and returned. Responses were received from the director of public relations, the registrar, the faculty advisor of the nontraditional student organization, the dean of enrollment services, the assistant dean of Gerholz Institute for Lifelong Learning, the director of the collegiate skills program, and the dean of the library. A complete listing of responses to the questionnaire is included in Appendix E.

The first item on the questionnaire referred to Ackell's (1982) three stages of adaptation which outline the stages institutions proceed through when accommodating nontraditional students. Stage one is the laissez-faire stage, stage two is the separatist stage, and stage three is the equity stage. Respondents were asked to read three paragraphs describing these stages.

In response to item one, "After reading the paragraphs below, in your opinion which stage best describes the position of Ferris relative to students over the age of twenty-five?," three responded stage one, two responded stage two, and one responded stage three. The seventh respondent indicated that FSU is partially in stage one and partially in stage three.

The second item on the questionnaire was "Please give two or three reasons why you selected the response that you did to question number one." Those respondents who listed Ferris as being in stage two or stage three made specific reference to services being offered by the Gerholz Institute of Lifelong Learning. Staff responding stage one tended to have contact with nontraditional students in academic areas whereas staff responding stage two and stage three tended to have contact with students in administrative areas.

Those positioning Ferris at stage one, the laissez-faire stage, indicated that the system works neither for nor against the student. These respondents indicated that instructional service is provided without age discrimination. One replied that there are no barriers to remove. These staff members noted that nontraditional students receive the same services provided other students.

The staff members who identified the institution as being in stage two or stage three identified telephone and mail registration as facilitating enrollment for nontraditional students. The on-campus and off-campus outreach programs and external degree programs organized by Gerholz were noted.

Item number three asked "Does your office or department provide services specifically geared to the needs of students aged twenty-five and older? If yes, please indicate several of the most important services." In response to this question, four of the FSU academic and administrative staff responded yes and two responded no. Services specifically geared to the needs of nontraditional students as identified by the respondents included: admission processing and admission counseling on programs and services; need-based financial aid as permitted by federal and state regulations; veterans affairs and benefits processing; assessment testing, GED testing, and challenge exams; placement services and credentials counseling; registration procedures through Gerholz enabling the adult learner to be admitted and registered on site; institutional advocacy; publicizing the graduation of students at off-campus sites separately from on-campus graduations; promoting courses/programs at off-campus sites for part-time, mainly adult, learners; and collegiate skills workshop materials that include nontraditional student activities.

The final item was "In your opinion, what additional things could Ferris be doing to assist students aged twenty-five and older to pursue their studies?" Suggestions included offering evening and weekend courses, and independent study classes, implementing programming for the Applied Technology Center in Grand Rapids, funding and staffing the regional center in southeast Michigan, developing and delivering appropriate support services for adult students on and off campus, strengthening nontraditional student recruitment activities, increasing nontraditional student support services, facilitating child care, revising admissions/registrations forms to include addresses for publicity purposes, organizing social events for nontraditional students, publishing a services booklet for nontraditional students, and deciding if FSU is to agressively pursue nontraditional students and, if so, to fund accordingly.

Results of Content Analysis of FSU Publications

A review of the literature indicated that institutional barriers are deterrents to the recruitment and retention of nontraditional students (Cross, 1984; Holm, 1988). A study completed by the Appalachia Educational Lab (1986:104) found that "uncertainty and dependence are fostered as a consequence of providing written admissions information with high reading levels." The average reading levels of the college catalogs analyzed in the Appalachia study was seventeen. The application packet used at one site had a reading index of 16.5 and program information brochures for one site ranged from thirteen to seventeen with an average reading level of sixteen (1986:103). This study recommended that these materials be revised to have a reading level no higher than twelve.

A content analysis of Ferris State University documents associated with the recruitment and admissions process of nontraditional students was made. Using the Grammatik IV microcomputer software program, several randomly selected passages relating to the admissions process were analyzed to obtain a reading level index on each. Copies of the content analyses appear in Appendix F.

A paragraph from page thirty-four of the FSU 1988-90 School Bulletin detailing admissions procedures had a Flesch-Kincaid reading level of grade fifteen. On the same page of this document, the paragraph explaining the transfer of credit scored a Flesch-Kincaid reading level of grade nineteen. A standard paragraph describing Ferris State University which is used in several program information brochures scored a Flesch-Kincaid reading level of grade sixteen. These reading levels are similar to those found in college catalogs analyzed by the Appalachia Educational Lab.

Two program information brochures from each of six schools were randomly selected from the display shelves of the Admissions Office for review. Only one program brochure from the School of Pharmacy was reviewed as this school offers a single program. A content analysis was run on two paragraphs from each publication. The Flesch-Kincaid reading grade level for each of these paragraphs is displayed in Table 28. The paragraph reading level scores ranged from ten to twenty. The mean scores for the schools ranged from 12.5 to eighteen.

Two form letters that are mailed to new students were randomly selected for reading level analysis. These form letters scored a lower reading level than did most of the program brochures and the school bulletin. The welcome letter sent by the Housing Office scored a Flesch-Kincaid reading grade level of ten. The welcome letter sent by the Department of Public Safety averaged a reading level of 12.5.

The FSU 1988-90 School Bulletin was reviewed to determine if photographs included nontraditional students as well as traditional students. When in doubt as to the age of a student, the count was placed in the nontraditional student category. Of 120 pictures, 102 were of traditional students. Nontraditional students were portrayed in eighteen (17.64%) photographs.

Table 28

Flesch-Kincaid Reading Grade Level Scores for Randomly Selected Program Information Brochures by FSU School and Program

	Flesch-Kincaid Reading Grade Level Score			
FSU School & Program	Paragraph One	Paragraph Two	Mean Score of Program	Mean Score of School
Technology				18
Architectural Technology	16	20	18	
Machine Tool Technology	17	19	18	
Business				12.75
Administrative Services	15	14	14.5	
Court & Freelance Reporting	10	12	11	
Arts & Sciences				14
Biotechnology	12	10	11	
Ornamental Horticulture	19	15	17	
Pharmacy	15	15	15	15
Education				15
Business Education	16	14	15	
Technical Education	13	17	15	
Allied Health				14
Dental Technology	12	18	15	
Nuclear Medicine Technology	15	11	13	
Optometry				13.5
Doctor of Optometry	17	11	14	
Opticinary	12	14	13	

Program information brochures usually contained three to four photographs. In a majority of the pictures, nontraditional students were rarely portrayed. It should be noted that identification of student groups in some publications was difficult due to the safety goggles worn by many of the students.

Chapter 5

INTERPRETATION, CONCLUSIONS, AND RECOMMENDATIONS

This final chapter contains three separate sections: interpretation, conclusions, and recommendations.

Interpretation

As the number of high school graduates decreases, Ferris State University (FSU) will increasingly compete with the other fourteen state universities, community colleges, and private schools for high school students. In an effort to maintain current enrollment levels, Ferris will need to recruit nontraditional students. One of the purposes of this investigation was to identify recruiting and retention strategies for the nontraditional student at Ferris State University. The following research questions were addressed.

1. What are the characteristics of the nontraditional students (students aged twenty-five and older when first enrolled at Ferris) and the traditional students (students younger than age twenty-five when first enrolled at Ferris) at Ferris State University?

2. What successful recruiting and retention activities exist for nontraditional students at other educational institutions in the United States?

3. What are the current FSU recruiting and retention activities for nontraditional students?

4. Which recruiting and retention activities used at other American educational institutions could be applied at Ferris to recruit and retain nontraditional students?

5. What are appropriate elements for an action plan impacting procedures and policies affecting the recruitment and retention of nontraditional students at Ferris State University?

Recognizing and adapting to the changes in the Ferris student population are of utmost importance to the university if administrators and faculty are to access successfully the effects of this population on the institution's academic programs and fiscal health. The future of the institution depends upon the ability of Ferris personnel to forecast the needs of their students and in the willingness of the academic and administrative staff to serve those needs. The future of education depends upon what educators think, believe, and value; and how they interact with the new technology and the people around them. America's greatest resource is its people and it is a "high touch," caring attitude that will increase the retention rate and the academic success of adult learners.

Due, in part, to an ambiguity of definition for the nontraditional student, a review of the literature revealed inadequate research on recruitment and retention strategies for nontraditional students. Reported student demographic data for nontraditional students at postsecondary institutions in the United States also was inadequate. When performed on a mainframe computer, the types of demographic anaylses made in this study took weeks and sometimes months of programming time and, therefore, were very costly. Unless institutions were required to supply this type of information for state or federal reports, it probably was not gathered. With the recent arrival of the 386-based microcomputer and software such as PC-File and Reflex, these kinds of analyses can be made in hours thus greatly reducing the cost. To date, many educational institutions continue to lack the tools and the technical expertise required to manipulate such data and most do not keep records with age as a variable. However, future research most likely will include an increased amount of statistical information on student demographics.

The examination of the characteristics and needs of nontraditional students yields a complex picture. Many adults are pragmatic and vocationally motivated in their studies. Others pursue education for developmental reasons and yet others for personal enrichment. Not only are the reasons for returning to school diverse but so are the learning styles of nontraditional students. Add to this a wide range of family responsibilities and community obligations, and the complexity of designing and marketing educational programs becomes an ever-changing challenge for educational institutions, public officials, and business and industry.

Identifying existing recruitment and retention activities for nontraditional students at other institutions that could impact Ferris policies was difficult because of the nature of Ferris State University and its physical location. Ferris is an open admissions institution offering career-oriented programs ranging from the certificate level to the graduate degree. Because of the open admissions policy, ACT scores of Ferris students are often lower than those found at most four-year institutions.

Ferris offerings are similar to those at community colleges in that they are technical in scope and use a hands-on approach in the classroom. The laddering concept encourages students to transfer credits from two-year degree programs at Ferris, community colleges, or other baccalaureate institutions into four-year degree programs at Ferris. Because FSU offers many baccalaureate degree programs and a few graduate programs, it also has characteristics similar to those found at four-year institutions. However, because of the technical nature of the programs, the four-year degree programs at Ferris tend to attract a different type of student than do the four-year degree programs at liberal arts institutions.

Further, it is anticipated that the demographic characteristics of the nontraditional student at Ferris do not follow the national trends for nontraditional students because of the physical location of the campus. The university is situated in a rural community where the local population about equals the Ferris student population; whereas, community colleges often are located in urban areas.

Interpretation of Student Demographic Data

When regarding the total student population at Ferris, the demographic profile of a typical student during the fall quarter, 1989, was a single, white male enrolled full-time in the School of Business. He did not transfer in any credit hours, his high school grade point average was 2.66, and his ACT composite score was 16.8. His FSU cumulative grade point average was 2.75.

The demographic profile of a traditional student was nearly identical to that of all students except that his FSU cumulative grade point average was slightly lower, 2.66. The demographic profile of a nontraditional student for the same time period remained a single, white male enrolled full-time in the School of Business. However, he transferred in credit hours, had a lower high school grade point average of 2.64, a lower ACT composite score of 16.7, and a higher FSU cumulative grade point average of 3.07.

Of the 11,878 students on the Ferris campus, 80.63 percent were traditional students and 19.37 percent were nontraditional students. The nontraditional FSU student population did not comprise a major portion of the total student population. However, it is expected that the nontraditional student population at Ferris will increase and that enrollment at the institution will follow national trends. Even though the population of Big Rapids is decreasing, the percentage of the population between the ages of twenty-five and seventy-five is increasing. This projected increase is expected to plateau by 1994. A nontraditional student market is available locally and efforts need to be made to attract this group to campus.

At the national level, part-time enrollment trends are much higher in both the traditional and nontraditional student populations than at Ferris. It is anticipated that part-time enrollment will increase at Ferris thus following national trends. Part-time enrollment often is associated with part-time employment and adult-role responsibilities. If these part-time students are enrolled in evening and/or weekend classes, administrative, counseling, financial aid, job placement, and developmental services will need to be expanded to include evening and weekend hours.

Nationally, female enrollment outnumbered male enrollment in both the traditional and nontraditional student populations. At Ferris, males dominated both of these groups. In the future, as an increasing number of females enter technical programs, female enrollment at Ferris is expected to increase. In 1988, twenty-four percent of the American households were headed by single parents and ninety percent of these single parent families were headed by women (NUCEA, 1990:14). To assist successfully these students, Ferris personnel will need to develop an understanding of the lifestyles of these nontraditional students and to provide increased flexibility in classroom presentations. Also, some of the male instructors who have taught courses primarily to male students may require some training on how to relate effectively with female students.

In 1989, minority student representation on campus was about eight percent and the estimated minority population of the City of Big Rapids was about eight percent. The estimated minority population of Grand Rapids was about twenty-three percent during this same year. However, because several postsecondary institutions are located in Grand Rapids, it is unlikely that the minority students from Grand Rapids will choose to commute to Big Rapids unless they are attracted to a specific program that is not available in Grand Rapids. If Ferris is to increase its minority student enrollment, the institution will need to recruit minority students from outside the Big Rapids and Grand Rapids areas. These students will not be able to commute from home; therefore, financial incentives will be needed to encourage minorities to move to the area. In addition, off-campus part-time jobs are relatively scarce as are local employment opportunities for student spouses.

Ferris primarily serves Michigan residents. Less than four percent (3.45%) of the total FSU student population came from outside the state. Of the traditional student population, 34.83% came from the Royal Oak, Detroit, and Flint areas whereas only 15.65% of the nontraditional students came from these southeastern areas. Of the nontraditional students, 44.76% came from the Grand Rapids/Big Rapids zip code area. Traditional students attending Ferris from this area totaled 21.27%. A review of the literature revealed that the majority of nontraditional students travel to class in twenty minutes or less. Most of the remaining students can get to class in forty-five minutes with one hour being the extreme upper limit. These data seem to indicate that nontraditional students move to the Big Rapids area and enroll as full-time students in order to complete their degree requirements as quickly as possible. If Ferris were to attract greater numbers of nontraditional students currently residing and working in the Big Rapids area, part-time enrollment for nontraditional students would be likely to increase.

Of the full-time nontraditional students, 71.51 percent transferred in credit hours. This trend indicates that the laddering concept outlined in FSU's mission statement is in place and is working. Because course equivalencies for most Michigan postsecondary institutions have been identified, an increased emphasis on the transfer of credit hours can be encouraged when attracting potential students without placing an excessive burden on admissions counselors and staff.

A higher percentage of full-time (13.33%) and part-time (16.28%) nontraditional students had high school grade point averages below 2.00 than did the full-time (9.57%) and part-time (12.59%) traditional students. However, the full-time nontraditional student had a mean FSU grade point average of 2.92 and the part-time nontraditional student had a mean of 3.22. This is contrasted with the full-time traditional student who had a lower mean FSU grade point average of 2.65 and the part-time traditional student who had a lower mean FSU grade point average of 2.58. These findings indicate that the nontraditional student pursues schooling seriously.

Ethnicity had relatively no effect on mean high school grade point averages within the various Ferris student groups. The lowest mean ACT composite for both the traditional and nontraditional student was in the black ethnic category. This trend continued when comparing traditional and nontraditional students by FSU cumulative grade point averages and ethnicity. The lowest mean FSU grade point averages for both the traditional and nontraditional students were in the black ethnic category. Other minority groups comprised 1.63% of the total student population making inferences difficult due to the small population size. It appears that if minority recruitment is to increase, additional emphasis will need to be placed on student developmental services for these adult learners.

Ferris exceeds national trends in that 71.14% of the nontraditional student population was enrolled in the business, computer science, education, and health fields. Nationally, forty-five percent of the courses taken by adults are concentrated in these four career areas. This finding is not surprising in that Ferris specializes in technical and career programs. Enrollment patterns in the various schools at FSU for full-time nontraditional and traditional students were similar as were enrollment patterns for most of the part-time students. A deviation of pattern is noted in the School of Allied Health where four times as many part-time nontraditional students enrolled as did full-time nontraditional students. An analysis of student demographics by program would provide deans and department heads with a knowledge of student characteristics that could influence class scheduling, recruiting efforts in targeted geographic locations, publication of specialized brochures, and the development of remediation programs.

In summary, the demographic profiles of students at Ferris are unlike those of many four-year institutions. This is largely due to the technical programs and the rural location of Ferris. Most of the FSU students were from Michigan, males outnumbered females, and minority enrollment was low. Part-time enrollment trends are higher at the national level in both the traditional and nontraditional student populations. To date, the number of adult students attending Ferris is lower than that of most four-year public institutions.

Interpretation of Questionnaire Results

Perceptions of Ferris academic and administrative staff regarding the recruitment and retention of nontraditional students vary greatly. Three respondents positioned Ferris in stage one, two respondents placed Ferris in stage two and one respondent indicated that the institution was in stage three. The seventh respondent indicated that FSU is partially in stage one and partially in stage three. The personnel who placed Ferris in stage one, the laissez-faire stage, tended to have contact with students in academic areas. This seems to indicate that either those staff members have a greater awareness of the needs of nontraditional students or else more administrative support is available to nontraditional students than is academic support. In any case, there does not appear to be a cohesive train of thought concerning the recruitment and retention of nontraditional students at Ferris.

The one hundred percent response rate indicates an interest in the study. The suggestions made by the respondents to assist adult learners in the pursuit of their studies at FSU were consistent with the findings of the literature review.

Interpretation of Content Analysis Results

A reading level above grade twelve is too high for the FSU 1988-90 School Bulletin when the total Ferris student population had a mean high school grade point average of 2.64 and a mean ACT composite score of 16.5. Program brochures for most of the schools should also maintain a reading level of grade twelve in order to decrease apprehension about the enrollment process and foster self-confidence of the prospective students.

Nontraditional students are not portrayed adequately in university publications. Even in those photographs that do depict adult learners, very few are over the age of forty.

Conclusions

As a result of this study, the following conclusions are presented.

1. The use of the term, nontraditional student is somewhat confusing. It often refers to minority students, female students, and part-time students. Future researchers should strive toward greater consistency when defining the student population aged twenty-five and older. This finding is supported by Hughes's (1983) synthesis of

the literature on nontraditional students in higher education.

2. The lack of pertinent research indicates a need for educators of adult learners to publish their findings and experiences so that other professionals have access to and can benefit from this information.

3. Due to the nature of Ferris State University and its physical location, recruitment and retention activities used at other postsecondary institutions should be carefully evaluated for appropriateness before being adopted at Ferris.

4. Ferris State University currently lags behind national trends in the percentage of nontraditional students served at the institution. However, due to a decrease in high school graduates and an increase in the percentage of older Americans, the number of nontraditional students at Ferris State University is expected to increase.

5. Information is the key to every aspect of a student's academic endeavor. If Ferris State University is to meet the needs of students; administrators, faculty, and staff must be aware of the demographic characteristics, learning styles, and needs of the populace served. Giczkowski indicates that "all segments of the college community should be made aware of changing enrollment

patterns" (1990:B2). The study conducted by Pitt Community College indicates that

> Recruitment always begins with advanced planning. An effective promotion cannot be developed without planning and implementation time. If recruitment is to be an institutional effort, planning must involve all staff to familiarize them with the promotions, to define or target audiences, to determine how to best reach target groups and to determine the goals of the program in terms of enrollment and institutional income. Clear internal communications and interdepartmental knowledge is a prerequisite to successful planning and ultimate promotion (1985:75).

6. Looking at the demographic profiles of all students, of nontraditional students, or of traditional students is insufficient without taking into account the context of the institution or the program. The demographic data must be analyzed by school or even by program on a regular, continuing basis.

7. Respondents of the questionnaire indicated an awareness of the issues involved with the recruitment and retention of nontraditional students. These administrators and faculty members provided useful recommendations for future activities and could serve as capable advisors for future planning.

8. FSU school bulletins, informational program brochures, and admissions letters had a reading level too high for the target audience and these materials infrequently depicted adult learners in photos.

9. A large number of local adults needs to be convinced that there is much to be gained through education. Marketing strategies must be developed to attract these potential students to campus.

10. There is a need for FSU academic and administrative staff to study, discuss, and implement the action plan included in Appendix G of this document.

In Freedom to Learn for the 80's, Rogers states that not only is our educational system failing to meet the real needs of society, but that the traditional, conservative, and rigid structure of the system makes it exceptionally resistant to change (1983:1). If the needs of the new traditional (as opposed to the nontraditional) student are to be met, recruiting and teaching approaches must be adapted to the audience served.

Recommendations for the Improvement of Recruitment and Retention Activities for Nontraditional Students at Ferris State University

As a result of the findings in the literature review, an identification of FSU student demographic characteristics, an investigation of academic and administrative staff perceptions regarding nontraditional student recruitment and retention activities, and a content analysis of Ferris publications, the following recommendations are presented. An action plan summarizing these recommendations was submitted to the vice president of academic affairs at Ferris State University. A copy of this plan is included in Appendix G of this document.

1. It is recommended that deans' offices be provided with demographic data on all students enrolled in their schools. The Office of Academic Affairs would make this information available on disk in PC-File format no later than the third week of fall quarter. Training would be provided by the Office of Academic Affairs or the Instructional Resource Center to administrators and secretaries as designated by their deans to assist each school in the manipulation and understanding of these files. Access to these files will need to be restricted in order to comply with federal legislation regarding the privacy of information.

2. It is recommended that inservice training on the characteristics and needs of nontraditional students be given to FSU administration, faculty, and staff. These sessions would outline what to expect from students aged twenty-five and older. The positive qualities brought by these students to campus would be discussed in the workshops. For the initial sessions, an outside consultant would be hired to present the training. This would serve as an indicator to Ferris personnel that the administration is seriously committed to the project. Throughout the

year, additional sessions would be organized by the Office of Human Resources and/or the Timme Center for Faculty Development. Training materials developed by Pitt Community College (1985) and the Appalachia Educational Lab (1985, 1986) could be used as models when designing the program.

> Adult students as a group represent more diversity in life situations, goals, previous experiences, skill, intellectual capacities and styles of learning than most institutions are accustomed to acknowledging or planning for. A realistic awareness of this diversity is important for the institution and the student. Perhaps what is most important is an awareness of what this can mean in terms of educational quality for the institution, the traditional student body and the nontraditional and re-entry student body. Educational institutions must learn to serve the students they do and could have, not continue in ways that serve those they once had (O'Connor, 1985:15).

3. It is suggested that inservice training be given to Ferris faculty on effective teaching methods for nontraditional students. Again, hiring an outside consultant would serve as an indicator of administrative support of the project. Initial training could be offered during faculty orientation at the beginning of the school year. Other one-hour and half-day workshops could be offered throughout the year in the Instructional Resource Center. To keep training costs to a minimum, the majority of these workshops would be facilitated by Ferris

administrators and faculty with guest speakers presenting occasional sessions.

4. It is suggested that service hours for the Admissions Office, Registrar's Office, Financial Aid Office, Minority Affairs Office, Job Placement Office, and Business Office be extended to include weekend and evening hours during the periods of registration, schedule changes, and student orientation.

5. It is recommended that a full-color informational brochure be produced introducing nontraditional students to the services and programs available to adult learners at Ferris as well as outlining admissions requirements and procedures.

6. It is recommended that articles highlighting services, program offerings, and innovative instructional delivery systems for the nontraditional student be featured once a month in the weekly employee newsletter, FYI, to increase campus awareness of the needs and characteristics of the adult learner.

7. It is suggested that the biweekly student newspaper, The Torch, include a column for and about nontraditional students written by a nontraditional student.

8. It is recommended that school bulletins, informational program brochures, and admissions letters be

evaluated and revised to have a reading level no higher than twelve and to include pictures of nontraditional students when appropriate.

9. It is recommended that a toll-free number for admissions inquiries of nontraditional students be established and advertised. This line would be monitored by counselors and staff having specialized skills in dealing with adult learners and a working knowledge of Ferris programs and entry requirements.

10. It is suggested that FSU informational booths be located at community events and that program offerings be publicized through bulletin boards, radio spots, newspaper advertisements, and campus television.

11. It is recommended that technology be used to the fullest extent possible to improve instructional delivery and to streamline administrative procedures. Computer-assisted instruction, interactive video, video tapes, desktop presentations, and simulations could be used to accommodate different learning styles and scheduling conflicts. Expanded telephone registration, on-line access to student demographic data, and microcomputer data bases could be used to improve communication.

12. It is recommended that nontraditional students be required to attend a Ferris orientation seminar. This seminar would include speakers from student services, job

placement, financial aid, collegiate skills, academic counseling, personal counseling, minority affairs, recreation, the library, and the health center. The students would be introduced to faces, names, and services available through various offices on campus. Adult learners would receive instruction in library research using microfiche readers, microfilm readers, and CD-ROM's. The seminar would also help these students to identify their personal learning styles, motivators, and educational goals as well as to develop a sense of belonging on campus.

13. It is recommended that campus-sponsored activities for the spouses, children, families, and friends of nontraditional students be scheduled. It is essential that the support groups of nontraditional students be recognized by the institution. Not only do they assist in retention efforts but they are potential students as well.

14. It is suggested that an open house or exploratory evening when students are encouraged to bring college-age guests to class be regularly scheduled. This would provide interested adults with the opportunity to observe classroom presentations and to visit campus facilities.

15. It is suggested that tuition waivers be granted for the first class taken by nontraditional students at Ferris.

16. It is recommended that a means of rewarding faculty who are innovative and/or particularly successful in meeting the needs of nontraditional students be established. "Academic administrators -- vice presidents, deans, and division directors -- control significant incentives in the form of released time, supplemental contracts, and travel funds that can be effectively used to move faculty to achieve institutional goals" (Doucette, 1990:14).

17. It is recommended that a core of faculty who are in working with nontraditional students be identified. These educators would be assigned nontraditional students as advisees and would maintain periodic contact with their designated adult learners throughout the school year.

18. It is recommended that a strategic plan be developed for the institution which addresses the needs of the nontraditional student population. Kaufman (1986:34) states that no institution can be all things to all people. Therefore, in developing this plan, the institutional mission and clientele served must be clearly defined.

19. It is suggested that grant money to assist in various aspects of nontraditional student recruitment and retention be sought.

20. It is recommended that nontraditional students be tracked from the time of first inquiry, to graduation

and on through job placement. Follow-up studies should be made to determine the effectiveness of the entire educational experience.

21. It is recommended that campus personnel work with representatives from business and industry and Ferris alumni to promote FSU programs and to attract nontraditional students to campus.

22. It is recommended that curricula be designed to meet the needs of the work force and to efficiently and effectively retrain workers. Working with business and industry, FSU administrators should not only examine course content but also the instructional format, class duration time, number of class sessions, and facilities used.

23. It is recommended that a nontraditional student organization be established on campus. This organization would be given a meeting room, accorded a telephone line, assigned a faculty advisor, and granted a small budget. This group would be encouraged to develop a peer counseling program to provide incoming and continuing support to adult learners.

24. It is recommended that scholarships for minority students aged twenty-five or older be established by the Office of Minority Affairs.

25. It is recommended that FSU personnel study and discuss the action plan included in Appendix G of this

document. Within budgetary constraints, this plan should be implemented to meet the recruitment and retention needs of nontraditional students at Ferris State University.

26. It is recommended that periodic evaluation of recruitment and retention efforts be made to identify both the strengths and weaknesses of current activities. Methods and procedures will need to be revised to meet the changing needs of the campus.

Hughes aptly summarizes the challenge presented by nontraditional students to higher education.

> In conclusion, the challenge facing student personnel is greater than purely responding effectively to non-traditional students. The challenge is to integrate into higher education an ability to respond quickly and effectively to an ever-changing student population (1983:61).

Faculty, administration, and staff at Ferris State University must be aware of the changing student population and capable of adapting to the needs of these students. In order to do so, university leadership must minimize institutional barriers to innovation and change, regardless of the clientele.

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APPENDIX A

LETTERS OF SUPPORT

Ferris State University
Office of Academic Affairs

January 30, 1990

Sharon K. Octernaud
Programs for Higher Education
Nova University
3301 College Avenue
Fort Lauderdale, FL 33314

Dear Sharon:

I appreciated the opportunity to review your MARP proposal and wish to inform you that the Academic Affairs Office is certainly supportive of this project.

Our office is completely willing to cooperate as necessary both to assist you in obtaining the data as outlined in your proposal, but to periodically review your research to insure that the completed project will be of use at Ferris.

Since we have not looked at any data relative to new traditional students it is difficult to know precisely what the trends are with that group. It is my "gut" feeling that this group will form a more important portion of our student body as time progresses as the declining high school student population begins to be really noticed.

We certainly would take any recommendations you made very seriously. Recommendations requiring budget would, of course, be subject to the competing with other worthwhile projects in the budgetary planning process. Recommendations costing little would be seriously examined for immediate implementation. My guess is that we would convene the new traditional student group leadership to examine your findings and test them for relevance at Ferris with that group.

Again, we are very supportive of your project, and will certainly use the results.

Let us know how we can assist.

Sincerely,

Sid Sytsma
Assistant Vice President
Planning and Administration

Ferris State University
Office of Academic Affairs

February 23, 1990

Sharon K. Octernaud
Programs for Higher Education
Nova University
3301 College Avenue
Fort Lauderdale, FL 33314

Dear Sharon:

I appreciated the opportunity to review the final draft of your MARP proposal and have shared it with Vice President Nash. We remain supportive of the project.

We receive a lot of studies from a large variety of people who desire that the University change some policy or another, wish that the University would treat a particular group differentially, or believe that a particular area within Academic Affairs should have a higher priority. Based on a long history of looking at many of these proposals, I believe it is very important that regardless of the amount of research you undertake for your MARP, that you present your recommendations in such a manner that the Vice President does not have to dig through 200+ pages of a document to get to the essence. I would recommend that the portion of your MARP designed to influence policy at Ferris be structured such that it is concise, to the point, and under no circumstances longer 10 pages. Anything much beyond this will probably exceed the attention span of the Vice President (probably mine too).

Again, our office is very supportive of your project. It is my understanding that the President recently met with the non-traditional student group at FSU for the first time. She is the first President at FSU to initiate a meeting with this group. I believe that fact alone makes your MARP even more potentially valuable and its findings likely to be utilized.

Sincerely,

Sid

Sid Sytsma
Assistant Vice President
Planning and Administration

Big Rapids, Michigan 49307 • (616) 592-2300

APPENDIX B

MISSION AND ROLE STATEMENT

FERRIS STATE UNIVERSITY
MISSION AND ROLE STATEMENT

Ferris State University has a clearly defined mission and distinct roles based on its long history as a career-oriented educational institution, the environment in which it currently exists, and its stated focus for future planning. Its mission rises from the broad, fundamental, philosophical purposes within which the University operates; its roles, from the breadth and depth of its program commitments. Both are critical to the strategic planning process and should be reviewed at least every five years and more frequently if circumstances warrant.

STATEMENT OF MISSION

Ferris State University, as a public university, is dedicated to providing a broad range of career-oriented and professional programs and public services to the people of the State of Michigan and beyond. Within the limits of its resources, Ferris State is dedicated to educating all students who possess the requisite capacity to learn, for the purpose of preparing them to perform the skills required for them to succeed in their chosen occupations and fulfill their career objectives. Central to each educational program is the incorporation of both high quality technical/professional education within the student's chosen discipline and a liberal studies core designed to prepare that student for the demands of citizenship in a constantly changing, global society.

As a career-oriented educational institution, the University accepts and welcomes its responsibilities for sharing its expertise with people and organizations through public service programs, and for providing its educational and applied research resources for the development and expansion of the economy of Michigan and the nation.

STATEMENT OF ROLES

Offering a range of certificate, associate, baccalaureate, graduate and professional programs, Ferris State University fills several important roles in Michigan's system of higher education. Ferris State is a distinctive institution of applied higher education. It provides statewide leadership in discovering, developing, and teaching new career-oriented programs.

The University is committed to educating a diverse array of students who have the ability and desire to learn and who wish to pursue its distinctive programs. Through its open admissions policy, Ferris State offers a number of students an opportunity for college success through provisional admission, and remedial and tutorial support classes.

The University encourages student success by offering students the opportunity to complete a certificate or associate degree program and then to continue their education by "laddering" directly into a wide variety of upper-division career curricula. This opportunity is available to both Ferris students and to students who transfer from community colleges or other baccalaureate institutions. The University also plays a role in post-baccalaureate education by offering a limited number of graduate and professional programs.

The University emphasizes high quality teaching as its primary responsibility, while encouraging applied and basic research. To enhance its educational programs, the University seeks and maintains mutually beneficial relationships with Michigan's industry, business and professions. These activities are central to Ferris' on-campus and off-campus programming and are important in enabling the University to carry out its educational and public service responsibilities.

APPENDIX C

COVER LETTER AND QUESTIONNAIRE

Ferris State University
Office of Academic Affairs

May 24, 1990

Dr. Lawrence J. McCrank
Dean - LIS Administrative Services
Ferris State University Library
Ferris State University
Big Rapids, MI 49307

Dear Dr. McCrank:

Sharon Octernaud is currently on sabbatical leave from Ferris and is working on her doctorate at Nova University in Ft. Lauderdale, FL. Her major applied research project (dissertation) is entitled "The Nontraditional Student at Ferris State University: Implications for Recruitment and Rentention."

Sharon has been working closely with the Office of Academic Affairs in obtaining statistical data. The Office of Academic Affairs is interested in this study and will seriously review its findings and recommendations. To enhance her research, Sharon needs input from various departments at Ferris.

We would appreciate your taking the time to complete the enclosed questionnaire. After answering the four questions, please return it to me in the envelope provided. I will forward all of the completed forms to Sharon.

Thank you for assisting us in our endeavor to meet the needs of Ferris students.

Sincerely,

Sid

Sid Sytsma
Assistant Vice President for Academic Affairs

Big Rapids, Michigan 49307 • (616) 592-2300

Questionnaire on Services Provided by Ferris State University to Nontraditional Students

The American postsecondary student population is changing. Students aged twenty-five and older will continue to comprise a larger portion of the student body. Recognizing and adapting to the changes in the student population is of utmost importance to Ferris State University in order to serve the needs of this group. Research reveals that institutions accommodating nontraditional students proceed through three stages of adaptation: the laissez-faire stage, the separatist stage, and the equity stage. The following paragraphs provide a synopsis of Ackell's (1982) description of each of these stages. After reading the paragraphs below, please answer the four questions on the following page.

Stage One – Laissez-Faire Stage

The laissez-faire stage is characterized by a simple removal of any barriers or artificial constraints on adults. Such factors as age requirements, parental consent forms, sex or racial requirements, and residency requirements are addressed. Thus, adult learners do the best they can within a system that works neither for nor against them. According to Ackell, adults are allowed to be as entrepreneurial and aggressive as they wish in dealing with the institution. In the laissez-faire stage, institutions tend to lack provisions for adult students. For instance, there is no active recruitment, no special support services, no curriculum development efforts especially for adults, and no faculty development efforts for dealing with adults.

Stage Two – Separatist Stage

During the separatist stage, institutions are faced with an increased enrollment of adult students. Adults are essentially segregated from the major student body and given separate specially developed programs, usually at different times and locations from the traditional student body and often with a lack of effective support services. Ackell suggests that these programs are also given a priority and status demonstrably lower than those of traditional programs. Adults become exploited economically and sometimes educationally as well. Fees are not adjusted, the services are weak, if available at all, and there is usually substantially less general fund support than that given to programs for younger students.

Stage Three – Equity Stage

During the equity stage, the institution actively recruits adult students, provides appropriate delivery systems for adult learning, offers a fully integrated curriculum, and uses fully integrated faculty. Degree credits for prior learning are offered and administrative services are made available by telephone, mail, during the evening, and on weekends. Academic advising, personal counseling, financial advising, career counseling, and other student support services are available in the evening. Senior policy-making bodies of the university are aware of adult students and administrative policy and practice is proactive rather than reactive in dealing with nontraditional student needs and problems.

1. In your opinion, which stage best describes the position of Ferris relative to students over the age of twenty-five? (Please check one.)

Stage One ______ Stage Two ______ Stage Three ______

2. Please give two or three reasons why you selected the response that you did to question number one.

3. Does **your** office or department provide services specifically geared to the needs of students aged twenty-five and older? Yes ______ No ______ If yes, please indicate several of the most important services.

4. In your opinion, what additional things could Ferris be doing to assist students aged twenty-five and older to pursue their studies?

Name of Respondent: ______________________________

Position Title: ______________________________

Date: ____________________

Thank you for taking the time to respond to these questions. Please return this questionnaire in the enclosed envelope to the Office of Academic Affairs. I anticipate completion of my major applied research project by December and will happily share the results of this study with you upon request.

Sharon Octernaud 5/10/90

APPENDIX D

ENROLLMENT HEAD COUNTS AND PERCENTAGES FOR FSU PROGRAMS

```
                          Headcount Students @ FSU
                          NonTraditional Students
                             Total Enrollment

Summary: @COUNT    Field:   BIRTHYR
Rows: CURRIC_NAM   Columns:
                        ALL
                       ------
 ACCELERATED BUSINESS       2
 ACCOUNT FINANCE 4 YR       4
 ACCOUNTING 4YR            62
 ACCOUNTING 4YR XFR         5
 ADM ASSISTANT 2YR          9
 ADMINISTRAT SERVS T        3
 ADMINISTRATIVE SERVS       8
 ADVERTISING                8
 ADVERTISING TRANSFER       5
 AERIAL MAPPING TECH        8
 ALLIED HEALTH ED          13
 APPLIED BIOLOGY 4YR        5
 APPLIED MATHEMATICS        3
 ARCHITECT TECH             6
 AUDIOVISUAL PROD 2YR       4
 AUTO & H/E MGMT 4YR       31
 AUTO MACHINE               3
 AUTO SERVICE              13
 BIOTECHNOLOGY              3
 BLDG CONST TECH           10
 BS HOSPITALITY MGT T      11
 BS MED RECORD ADM         38
 BS NUCLEAR MEDICINE        6
 BS PRINTING MGMT           8
 BS SOCIAL WORK            63
 BUS ECON TRANSFER          1
 BUSINESS AD TRANSFER      16
 BUSINESS ADMIN           165
 BUSINESS ECONOMICS         2
 BUSINESS ED               39
 CERTIFICATION             12
 CHILD DEVELOPMENT          3
 COMM SCH EDUC/REC          1
 COMP INFO SYS 4YR         30
 COMP INFO SYS 4YR T       24
 COMP INFO SYS ACCT 4       6
 COMP INFO SYS MGT 4        8
 COMP INFO SYS MKTG 4       1
 CONST ENG TECH 2YR         3
 CONSTRUCT MGMT 4YR         6
 COURT/FREELANCE RPTG      13
 CRIMINAL JUSTICE 4YR      36
 DENTAL ASSISTANT           3
 DENTAL HYGIENE            13
 DENTAL TECHNOLOGY         15
 DIVERSIFIED BUSINESS       3
 ELEC/E'TRON ENG TECH      14
 ENERGY MANAGEMENT         13
 EVENING COLLEGE          158
 EXD HEALTH SYS MGMT       25
 EXD UNDECLARED MAJOR       1
 FINANCE 4YR                7
```

Total Enrollment, Nontraditional Students -- Page 2

FINANCE 4YR XFR	1
FOOD SERVICE MGMT	18
GENERAL STUDIES	32
HEALTH SYSTEMS MGT	14
HEAT REF & AIR COND	17
HEAVY EQUIP SERVICE	12
IND & ENV HEALTH MGT	36
IND CHEMICAL TECH	2
IND ELECTRONICS TECH	20
INS/REAL ESTATE 4YR	3
INSURANCE 4YR	4
INSURANCE 4YR XFR	3
INTENSIV ENGLISH PRO	27
INTERNATL BUS XFR	2
INTRNTL BUSINESS 4YR	4
JOURNALISM ASSOCIATE	1
LEGAL ASSISTANT	10
MACHINE TOOL	2
MANAGEMENT 4YR	9
MANAGEMENT TRANSFER	6
MANUFACT ENGIN TECH	32
MANUFACTURING TECH	6
MARKETING 4YR	14
MARKETING PGM 4YR	48
MARKETING PTM 4YR	7
MARKETING RETAIL	3
MARKETING RETAIL XFR	2
MARKETING SALES	10
MARKETING SALES XFR	4
MARKETING TRANSFER	6
MASTER/ACCOUNTANCY	7
MATHEMATICS EDUC	19
MECHANICAL ENG TECH	5
MEDICAL LAB TECH 2YR	2
MEDICAL RECORDS TECH	10
MEDICAL TECHNOLOGY	8
MS CISM CONDITIONAL	13
MS COMP INFO SYS MGT	14
MS OCCUPATIONAL EDUC	30
MSOE PROVISIONAL	17
NUCLEAR MEDICINE 2YR	5
NURSING 2YR	17
NURSING 4YR	153
OD OPTOMETRY	64
OFFICE ADM EX SECTY	2
OPTICIANRY	9
OPTOMETRIC TECH	2
ORNAMENTAL HORT 2YR	5
PER MGT/IND REL XFR	5
PER MGT/IND RLTION	6
PHARMACY	113
PLASTICS ENG TECH	13
PLASTICS TECHNOLOGY	17
PRE-ARTS	8
PRE-ENG	3
PRE-LAW	1
PRE-MEDICINE	2
PRE-MORTUARY SCI	1
PRE-OPTOMETRY	4
PRE-PHARMACY	13

PRE-SCIENCE	11
PRE-TEACHING ELEM	3
PRE-TEACHING SEC	3
PRE-VETERINARY SCI	1
PRINTING	11
PROD DESIGN ENG TECH	6
PRODUCTION MGT 4YR	5
PRODUCTION MGT XFR	5
PUBLIC RELATIONS	2
PUBLIC RELATIONS XFR	1
QNT BUSINESS	3
RADIOGRAPHY	13
REAL ESTATE 2YR	3
REC LEADERSHIP & MGT	10
RESPIRATORY THERAPY	2
RET FASHN MERCH 2YR	2
SCIENCE ED	14
SML BUSINESS MGT	4
SML BUSINESS MGT XFR	3
SURVEYING 4YR	26
SURVEYING TECH 2YR	3
TECH COMMUNICATIONS	7
TECH ILLUSTRATION	4
TECHNICAL DRAFTING	2
TECHNICAL EDUCATION	37
TRAINING-BUS & IND	2
TV PRODUCTION	19
UNDECLARED MAJOR	196
VISUAL COMMUNICA-2YR	4
VISUAL COMMUNICA-4YR	5
WAGE EARN HOME ECON	10
WELDING ENG TECH	6
WELDING TECHNOLOGY	6
ALL	2301

```
                                   Headcount Students @ FSU
                                   NonTraditional Students

                                      Total Enrollment

Summary: @COUNT    Field:    BIRTHYR
Rows: CURRIC_NAM   Columns:
 % Column                 ALL
                         ------
 ACCELERATED BUSINESS    0.0869
 ACCOUNT FINANCE 4 YR    0.1738
 ACCOUNTING 4YR          2.6945
 ACCOUNTING 4YR XFR      0.2173
 ADM ASSISTANT 2YR       0.3911
 ADMINISTRAT SERVS T     0.1304
 ADMINISTRATIVE SERVS    0.3477
 ADVERTISING             0.3477
 ADVERTISING TRANSFER    0.2173
 AERIAL MAPPING TECH     0.3477
 ALLIED HEALTH ED         0.565
 APPLIED BIOLOGY 4YR     0.2173
 APPLIED MATHEMATICS     0.1304
 ARCHITECT TECH          0.2608
 AUDIOVISUAL PROD 2YR    0.1738
 AUTO & H/E MGMT 4YR     1.3472
 AUTO MACHINE            0.1304
 AUTO SERVICE             0.565
 BIOTECHNOLOGY           0.1304
 BLDG CONST TECH         0.4346
 BS HOSPITALITY MGT T    0.4781
 BS MED RECORD ADM       1.6515
 BS NUCLEAR MEDICINE     0.2608
 BS PRINTING MGMT        0.3477
 BS SOCIAL WORK          2.7379
 BUS ECON TRANSFER       0.0435
 BUSINESS AD TRANSFER    0.6953
 BUSINESS ADMIN          7.1708
 BUSINESS ECONOMICS      0.0869
 BUSINESS ED             1.6949
 CERTIFICATION           0.5215
 CHILD DEVELOPMENT       0.1304
 COMM SCH EDUC/REC       0.0435
 COMP INFO SYS 4YR       1.3038
 COMP INFO SYS 4YR T      1.043
 COMP INFO SYS ACCT 4    0.2608
 COMP INFO SYS MGT 4     0.3477
 COMP INFO SYS MKTG 4    0.0435
 CONST ENG TECH 2YR      0.1304
 CONSTRUCT MGMT 4YR      0.2608
 COURT/FREELANCE RPTG     0.565
 CRIMINAL JUSTICE 4YR    1.5645
 DENTAL ASSISTANT        0.1304
 DENTAL HYGIENE           0.565
 DENTAL TECHNOLOGY       0.6519
 DIVERSIFIED BUSINESS    0.1304
 ELEC/E'TRON ENG TECH    0.6084
 ENERGY MANAGEMENT        0.565
 EVENING COLLEGE         6.8666
 EXD HEALTH SYS MGMT     1.0865
 EXD UNDECLARED MAJOR    0.0435
 FINANCE 4YR             0.3042
```

Total Enrollment, Nontraditional Students -- Page 2

FINANCE 4YR XFR	0.0435
FOOD SERVICE MGMT	0.7823
GENERAL STUDIES	1.3907
HEALTH SYSTEMS MGT	0.6084
HEAT REF & AIR COND	0.7388
HEAVY EQUIP SERVICE	0.5215
IND & ENV HEALTH MGT	1.5645
IND CHEMICAL TECH	0.0869
IND ELECTRONICS TECH	0.8692
INS/REAL ESTATE 4YR	0.1304
INSURANCE 4YR	0.1738
INSURANCE 4YR XFR	0.1304
INTENSIV ENGLISH PRO	1.1734
INTERNATL BUS XFR	0.0869
INTRNTL BUSINESS 4YR	0.1738
JOURNALISM ASSOCIATE	0.0435
LEGAL ASSISTANT	0.4346
MACHINE TOOL	0.0869
MANAGEMENT 4YR	0.3911
MANAGEMENT TRANSFER	0.2608
MANUFACT ENGIN TECH	1.3907
MANUFACTURING TECH	0.2608
MARKETING 4YR	0.6084
MARKETING PGM 4YR	2.086
MARKETING PTM 4YR	0.3042
MARKETING RETAIL	0.1304
MARKETING RETAIL XFR	0.0869
MARKETING SALES	0.4346
MARKETING SALES XFR	0.1738
MARKETING TRANSFER	0.2608
MASTER/ACCOUNTANCY	0.3042
MATHEMATICS EDUC	0.8257
MECHANICAL ENG TECH	0.2173
MEDICAL LAB TECH 2YR	0.0869
MEDICAL RECORDS TECH	0.4346
MEDICAL TECHNOLOGY	0.3477
MS CISM CONDITIONAL	0.565
MS COMP INFO SYS MGT	0.6084
MS OCCUPATIONAL EDUC	1.3038
MSOE PROVISIONAL	0.7388
NUCLEAR MEDICINE 2YR	0.2173
NURSING 2YR	0.7388
NURSING 4YR	6.6493
OD OPTOMETRY	2.7814
OFFICE ADM EX SECTY	0.0869
OPTICIANRY	0.3911
OPTOMETRIC TECH	0.0869
ORNAMENTAL HORT 2YR	0.2173
PER MGT/IND REL XFR	0.2173
PER MGT/IND RLTION	0.2608
PHARMACY	4.9109
PLASTICS ENG TECH	0.565
PLASTICS TECHNOLOGY	0.7388
PRE-ARTS	0.3477
PRE-ENG	0.1304
PRE-LAW	0.0435
PRE-MEDICINE	0.0869
PRE-MORTUARY SCI	0.0435
PRE-OPTOMETRY	0.1738
PRE-PHARMACY	0.565

PRE-SCIENCE	0.4781
PRE-TEACHING ELEM	0.1304
PRE-TEACHING SEC	0.1304
PRE-VETERINARY SCI	0.0435
PRINTING	0.4781
PROD DESIGN ENG TECH	0.2608
PRODUCTION MGT 4YR	0.2173
PRODUCTION MGT XFR	0.2173
PUBLIC RELATIONS	0.0869
PUBLIC RELATIONS XFR	0.0435
QNT BUSINESS	0.1304
RADIOGRAPHY	0.565
REAL ESTATE 2YR	0.1304
REC LEADERSHIP & MGT	0.4346
RESPIRATORY THERAPY	0.0869
RET FASHN MERCH 2YR	0.0869
SCIENCE ED	0.6084
SML BUSINESS MGT	0.1738
SML BUSINESS MGT XFR	0.1304
SURVEYING 4YR	1.1299
SURVEYING TECH 2YR	0.1304
TECH COMMUNICATIONS	0.3042
TECH ILLUSTRATION	0.1738
TECHNICAL DRAFTING	0.0869
TECHNICAL EDUCATION	1.608
TRAINING-BUS & IND	0.0869
TV PRODUCTION	0.8257
UNDECLARED MAJOR	8.518
VISUAL COMMUNICA-2YR	0.1738
VISUAL COMMUNICA-4YR	0.2173
WAGE EARN HOME ECON	0.4346
WELDING ENG TECH	0.2608
WELDING TECHNOLOGY	0.2608
ALL	100

Headcount Students @ FSU
Traditional Students
Total Enrollment

Summary: @COUNT Field: BIRTHYR
Rows: CURRIC_NAM Columns:

	ALL
ACCOUNT FINANCE 4 YR	50
ACCOUNTING 4YR	290
ACCOUNTING 4YR XFR	19
ADM ASSISTANT 2YR	34
ADMINISTRAT SERVS T	3
ADMINISTRATIVE SERVS	23
ADVERTISING	164
ADVERTISING TRANSFER	17
AERIAL MAPPING TECH	5
APPLIED BIOLOGY 4YR	84
APPLIED MATHEMATICS	19
ARCHITECT TECH	158
AUDIOVISUAL PROD 2YR	94
AUTO & H/E MGMT 4YR	106
AUTO BODY	42
AUTO MACHINE	32
AUTO SERVICE	191
AVIONICS	3
BIOTECHNOLOGY	5
BLDG CONST TECH	86
BS HOSPITALITY MGT T	32
BS MED RECORD ADM	46
BS NUCLEAR MEDICINE	9
BS PRINTING MGMT	43
BS SOCIAL WORK	204
BUS ECON TRANSFER	1
BUSINESS AD TRANSFER	57
BUSINESS ADMIN	594
BUSINESS ECONOMICS	11
BUSINESS ED	76
CERTIFICATION	1
CHILD DEVELOPMENT	54
COMP INFO SYS 4YR	153
COMP INFO SYS 4YR T	25
COMP INFO SYS ACCT 4	52
COMP INFO SYS MGT 4	57
COMP INFO SYS MKTG 4	24
CONST ENG TECH 2YR	27
CONSTRUCT MGMT 4YR	31
COURT/FREELANCE RPTG	66
CRIMINAL JUSTICE 4YR	508
DENTAL ASSISTANT	25
DENTAL HYGIENE	93
DENTAL TECHNOLOGY	33
DIVERSIFIED BUSINESS	60
ELEC/E'TRON ENG TECH	40
ENERGY MANAGEMENT	16
EVENING COLLEGE	49
FACILITY MANAGEMENT	13
FINANCE 4YR	46
FINANCE 4YR XFR	13
FOOD SERVICE MGMT	167

Total Enrollment, Traditional Students -- Page 2

GENERAL STUDIES	462
HEALTH SYSTEMS MGT	36
HEAT REF & AIR COND	91
HEAVY DUTY ENGINE	12
HEAVY EQUIP SERVICE	80
IND & ENV HEALTH MGT	54
IND CHEMICAL TECH	20
IND ELECTRONICS TECH	117
INS/REAL ESTATE 4YR	24
INSURANCE 4YR	31
INSURANCE 4YR XFR	2
INTENSIV ENGLISH PRO	23
INTERNATL BUS XFR	1
INTRNTL BUSINESS 4YR	37
JOURNALISM ASSOCIATE	72
LEGAL ASSISTANT	55
MACHINE TOOL	62
MANAGEMENT 4YR	243
MANAGEMENT TRANSFER	21
MANUFACT ENGIN TECH	39
MARKETING 4YR	207
MARKETING PGM 4YR	280
MARKETING PTM 4YR	52
MARKETING RETAIL	47
MARKETING RETAIL XFR	5
MARKETING SALES	91
MARKETING SALES XFR	19
MARKETING TRANSFER	18
MASTER/ACCOUNTANCY	3
MATHEMATICS EDUC	44
MECHANICAL ENG TECH	51
MEDICAL LAB TECH 2YR	17
MEDICAL RECORDS TECH	45
MEDICAL TECHNOLOGY	42
MS CISM CONDITIONAL	1
NUCLEAR MEDICINE 2YR	34
NURSING 2YR	39
NURSING 4YR	5
OD OPTOMETRY	61
OFF ADM LEGAL OPT	20
OFFICE ADM EX SECTY	37
OPTICIANRY	21
OPTOMETRIC TECH	23
ORNAMENTAL HORT 2YR	23
PER MGT/IND REL XFR	3
PER MGT/IND RLTION	19
PHARMACY	267
PLASTICS ENG TECH	71
PLASTICS TECHNOLOGY	151
PRE-ARTS	242
PRE-DENTISTRY	29
PRE-ENG	51
PRE-LAW	71
PRE-MEDICINE	47
PRE-MORTUARY SCI	14
PRE-OPTOMETRY	126
PRE-PHARMACY	292
PRE-SCIENCE	110
PRE-TEACHING ELEM	97
PRE-TEACHING SEC	53

Total Enrollment, Traditional Students -- Page 3

PRE-VETERINARY SCI	13
PRINTING	152
PROD DESIGN ENG TECH	29
PRODUCTION MGT 4YR	21
PRODUCTION MGT XFR	26
PUBLIC RELATIONS	55
PUBLIC RELATIONS XFR	7
QNT BUS TRANSFER	2
QNT BUSINESS	3
RADIOGRAPHY	73
REAL ESTATE 2YR	18
REC LEADERSHIP & MGT	70
RESPIRATORY THERAPY	22
RET FASHN MERCH 2YR	82
SCIENCE ED	49
SML BUSINESS MGT	58
SML BUSINESS MGT XFR	11
SURVEYING 4YR	34
SURVEYING TECH 2YR	6
TECH COMMUNICATIONS	9
TECH ILLUSTRATION	47
TECHNICAL DRAFTING	88
TECHNICAL EDUCATION	19
TV PRODUCTION	64
UNDECLARED MAJOR	18
VISUAL COMMUNICA-2YR	146
VISUAL COMMUNICA-4YR	16
WELDING ENG TECH	23
WELDING TECHNOLOGY	55
ALL	9577

Headcount Students @ FSU
Traditional Students
Total Enrollment

Summary: @COUNT Field: BIRTHYR
Rows: CURRIC_NAM Columns:

% Column	ALL
ACCOUNT FINANCE 4 YR	0.5221
ACCOUNTING 4YR	3.0281
ACCOUNTING 4YR XFR	0.1984
ADM ASSISTANT 2YR	0.355
ADMINISTRAT SERVS T	0.0313
ADMINISTRATIVE SERVS	0.2402
ADVERTISING	1.7124
ADVERTISING TRANSFER	0.1775
AERIAL MAPPING TECH	0.0522
APPLIED BIOLOGY 4YR	0.8771
APPLIED MATHEMATICS	0.1984
ARCHITECT TECH	1.6498
AUDIOVISUAL PROD 2YR	0.9815
AUTO & H/E MGMT 4YR	1.1068
AUTO BODY	0.4386
AUTO MACHINE	0.3341
AUTO SERVICE	1.9944
AVIONICS	0.0313
BIOTECHNOLOGY	0.0522
BLDG CONST TECH	0.898
BS HOSPITALITY MGT T	0.3341
BS MED RECORD ADM	0.4803
BS NUCLEAR MEDICINE	0.094
BS PRINTING MGMT	0.449
BS SOCIAL WORK	2.1301
BUS ECON TRANSFER	0.0104
BUSINESS AD TRANSFER	0.5952
BUSINESS ADMIN	6.2024
BUSINESS ECONOMICS	0.1149
BUSINESS ED	0.7936
CERTIFICATION	0.0104
CHILD DEVELOPMENT	0.5639
COMP INFO SYS 4YR	1.5976
COMP INFO SYS 4YR T	0.261
COMP INFO SYS ACCT 4	0.543
COMP INFO SYS MGT 4	0.5952
COMP INFO SYS MKTG 4	0.2506
CONST ENG TECH 2YR	0.2819
CONSTRUCT MGMT 4YR	0.3237
COURT/FREELANCE RPTG	0.6892
CRIMINAL JUSTICE 4YR	5.3044
DENTAL ASSISTANT	0.261
DENTAL HYGIENE	0.9711
DENTAL TECHNOLOGY	0.3446
DIVERSIFIED BUSINESS	0.6265
ELEC/E'TRON ENG TECH	0.4177
ENERGY MANAGEMENT	0.1671
EVENING COLLEGE	0.5116
FACILITY MANAGEMENT	0.1357
FINANCE 4YR	0.4803
FINANCE 4YR XFR	0.1357
FOOD SERVICE MGMT	1.7438

Total Enrollment, Traditional Students -- Page2

GENERAL STUDIES	4.8241
HEALTH SYSTEMS MGT	0.3759
HEAT REF & AIR COND	0.9502
HEAVY DUTY ENGINE	0.1253
HEAVY EQUIP SERVICE	0.8353
IND & ENV HEALTH MGT	0.5639
IND CHEMICAL TECH	0.2088
IND ELECTRONICS TECH	1.2217
INS/REAL ESTATE 4YR	0.2506
INSURANCE 4YR	0.3237
INSURANCE 4YR XFR	0.0209
INTENSIV ENGLISH PRO	0.2402
INTERNATL BUS XFR	0.0104
INTRNTL BUSINESS 4YR	0.3863
JOURNALISM ASSOCIATE	0.7518
LEGAL ASSISTANT	0.5743
MACHINE TOOL	0.6474
MANAGEMENT 4YR	2.5373
MANAGEMENT TRANSFER	0.2193
MANUFACT ENGIN TECH	0.4072
MARKETING 4YR	2.1614
MARKETING PGM 4YR	2.9237
MARKETING PTM 4YR	0.543
MARKETING RETAIL	0.4908
MARKETING RETAIL XFR	0.0522
MARKETING SALES	0.9502
MARKETING SALES XFR	0.1984
MARKETING TRANSFER	0.188
MASTER/ACCOUNTANCY	0.0313
MATHEMATICS EDUC	0.4594
MECHANICAL ENG TECH	0.5325
MEDICAL LAB TECH 2YR	0.1775
MEDICAL RECORDS TECH	0.4699
MEDICAL TECHNOLOGY	0.4386
MS CISM CONDITIONAL	0.0104
NUCLEAR MEDICINE 2YR	0.355
NURSING 2YR	0.4072
NURSING 4YR	0.0522
OD OPTOMETRY	0.6369
OFF ADM LEGAL OPT	0.2088
OFFICE ADM EX SECTY	0.3863
OPTICIANRY	0.2193
OPTOMETRIC TECH	0.2402
ORNAMENTAL HORT 2YR	0.2402
PER MGT/IND REL XFR	0.0313
PER MGT/IND RLTION	0.1984
PHARMACY	2.7879
PLASTICS ENG TECH	0.7414
PLASTICS TECHNOLOGY	1.5767
PRE-ARTS	2.5269
PRE-DENTISTRY	0.3028
PRE-ENG	0.5325
PRE-LAW	0.7414
PRE-MEDICINE	0.4908
PRE-MORTUARY SCI	0.1462
PRE-OPTOMETRY	1.3157
PRE-PHARMACY	3.049
PRE-SCIENCE	1.1486
PRE-TEACHING ELEM	1.0128
PRE-TEACHING SEC	0.5534

Total Enrollment, Traditional Students -- Page 3

PRE-VETERINARY SCI	0.1357
PRINTING	1.5871
PROD DESIGN ENG TECH	0.3028
PRODUCTION MGT 4YR	0.2193
PRODUCTION MGT XFR	0.2715
PUBLIC RELATIONS	0.5743
PUBLIC RELATIONS XFR	0.0731
QNT BUS TRANSFER	0.0209
QNT BUSINESS	0.0313
RADIOGRAPHY	0.7622
REAL ESTATE 2YR	0.188
REC LEADERSHIP & MGT	0.7309
RESPIRATORY THERAPY	0.2297
RET FASHN MERCH 2YR	0.8562
SCIENCE ED	0.5116
SML BUSINESS MGT	0.6056
SML BUSINESS MGT XFR	0.1149
SURVEYING 4YR	0.355
SURVEYING TECH 2YR	0.0627
TECH COMMUNICATIONS	0.094
TECH ILLUSTRATION	0.4908
TECHNICAL DRAFTING	0.9189
TECHNICAL EDUCATION	0.1984
TV PRODUCTION	0.6683
UNDECLARED MAJOR	0.188
VISUAL COMMUNICA-2YR	1.5245
VISUAL COMMUNICA-4YR	0.1671
WELDING ENG TECH	0.2402
WELDING TECHNOLOGY	0.5743
ALL	100

```
                        Headcount Students @ FSU
                        NonTraditional Students
                         Full-Time Enrollment

 Summary: @COUNT    Field:   BIRTHYR
 Rows: CURRIC_NAM   Columns:
                        ALL
                        ------
  ACCELERATED BUSINESS       1
  ACCOUNT FINANCE 4 YR       3
  ACCOUNTING 4YR            30
  ACCOUNTING 4YR XFR         4
  ADM ASSISTANT 2YR          6
  ADMINISTRAT SERVS T        1
  ADMINISTRATIVE SERVS       3
  ADVERTISING                7
  ADVERTISING TRANSFER       5
  AERIAL MAPPING TECH        8
  ALLIED HEALTH ED           4
  APPLIED BIOLOGY 4YR        5
  APPLIED MATHEMATICS        3
  ARCHITECT TECH             5
  AUDIOVISUAL PROD 2YR       3
  AUTO & H/E MGMT 4YR       29
  AUTO MACHINE               3
  AUTO SERVICE              10
  BIOTECHNOLOGY              3
  BLDG CONST TECH            9
  BS HOSPITALITY MGT T       9
  BS MED RECORD ADM         16
  BS NUCLEAR MEDICINE        6
  BS PRINTING MGMT           8
  BS SOCIAL WORK            55
  BUS ECON TRANSFER          1
  BUSINESS AD TRANSFER      13
  BUSINESS ADMIN            41
  BUSINESS ECONOMICS         2
  BUSINESS ED               25
  CERTIFICATION              6
  CHILD DEVELOPMENT          1
  COMP INFO SYS 4YR         23
  COMP INFO SYS 4YR T       19
  COMP INFO SYS ACCT 4       5
  COMP INFO SYS MGT 4        8
  COMP INFO SYS MKTG 4       1
  CONST ENG TECH 2YR         3
  CONSTRUCT MGMT 4YR         6
  COURT/FREELANCE RPTG      12
  CRIMINAL JUSTICE 4YR      34
  DENTAL ASSISTANT           1
  DENTAL HYGIENE            13
  DENTAL TECHNOLOGY         10
  DIVERSIFIED BUSINESS       2
  ELEC/E'TRON ENG TECH      14
  ENERGY MANAGEMENT         12
  EVENING COLLEGE            4
  FINANCE 4YR                7
  FINANCE 4YR XFR            1
  FOOD SERVICE MGMT         16
  GENERAL STUDIES           24
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HEALTH SYSTEMS MGT	13
HEAT REF & AIR COND	16
HEAVY EQUIP SERVICE	11
IND & ENV HEALTH MGT	31
IND CHEMICAL TECH	2
IND ELECTRONICS TECH	20
INS/REAL ESTATE 4YR	3
INSURANCE 4YR	4
INSURANCE 4YR XFR	3
INTENSIV ENGLISH PRO	26
INTERNATL BUS XFR	2
INTRNTL BUSINESS 4YR	3
JOURNALISM ASSOCIATE	1
LEGAL ASSISTANT	6
MACHINE TOOL	2
MANAGEMENT 4YR	6
MANAGEMENT TRANSFER	5
MANUFACT ENGIN TECH	11
MANUFACTURING TECH	1
MARKETING 4YR	13
MARKETING PGM 4YR	21
MARKETING PTM 4YR	4
MARKETING RETAIL	3
MARKETING RETAIL XFR	2
MARKETING SALES	8
MARKETING SALES XFR	4
MARKETING TRANSFER	6
MASTER/ACCOUNTANCY	4
MATHEMATICS EDUC	15
MECHANICAL ENG TECH	4
MEDICAL LAB TECH 2YR	1
MEDICAL RECORDS TECH	9
MEDICAL TECHNOLOGY	8
MS COMP INFO SYS MGT	3
MS OCCUPATIONAL EDUC	2
MSOE PROVISIONAL	2
NUCLEAR MEDICINE 2YR	5
NURSING 2YR	13
NURSING 4YR	2
OD OPTOMETRY	64
OFFICE ADM EX SECTY	1
OPTICIANRY	9
OPTOMETRIC TECH	2
ORNAMENTAL HORT 2YR	3
PER MGT/IND REL XFR	2
PER MGT/IND RLTION	5
PHARMACY	107
PLASTICS ENG TECH	12
PLASTICS TECHNOLOGY	12
PRE-ARTS	7
PRE-ENG	3
PRE-LAW	1
PRE-MEDICINE	2
PRE-MORTUARY SCI	1
PRE-OPTOMETRY	4
PRE-PHARMACY	11
PRE-SCIENCE	5
PRE-TEACHING ELEM	2
PRE-TEACHING SEC	3
PRINTING	8

PROD DESIGN ENG TECH	6
PRODUCTION MGT 4YR	3
PRODUCTION MGT XFR	5
PUBLIC RELATIONS	2
QNT BUSINESS	3
RADIOGRAPHY	13
REAL ESTATE 2YR	2
REC LEADERSHIP & MGT	9
RESPIRATORY THERAPY	2
RET FASHN MERCH 2YR	2
SCIENCE ED	12
SML BUSINESS MGT	4
SML BUSINESS MGT XFR	3
SURVEYING 4YR	22
SURVEYING TECH 2YR	3
TECH COMMUNICATIONS	5
TECH ILLUSTRATION	4
TECHNICAL DRAFTING	2
TECHNICAL EDUCATION	15
TRAINING-BUS & IND	1
TV PRODUCTION	19
UNDECLARED MAJOR	2
VISUAL COMMUNICA-2YR	4
VISUAL COMMUNICA-4YR	4
WAGE EARN HOME ECON	3
WELDING ENG TECH	5
WELDING TECHNOLOGY	6
ALL	1260

Headcount Students @ FSU
NonTraditional Students
Full-Time Enrollment

Summary: @COUNT Field: BIRTHYR
Rows: CURRIC_NAM Columns:

% Column	ALL
ACCELERATED BUSINESS	0.0794
ACCOUNT FINANCE 4 YR	0.2381
ACCOUNTING 4YR	2.381
ACCOUNTING 4YR XFR	0.3175
ADM ASSISTANT 2YR	0.4762
ADMINISTRAT SERVS T	0.0794
ADMINISTRATIVE SERVS	0.2381
ADVERTISING	0.5556
ADVERTISING TRANSFER	0.3968
AERIAL MAPPING TECH	0.6349
ALLIED HEALTH ED	0.3175
APPLIED BIOLOGY 4YR	0.3968
APPLIED MATHEMATICS	0.2381
ARCHITECT TECH	0.3968
AUDIOVISUAL PROD 2YR	0.2381
AUTO & H/E MGMT 4YR	2.3016
AUTO MACHINE	0.2381
AUTO SERVICE	0.7937
BIOTECHNOLOGY	0.2381
BLDG CONST TECH	0.7143
BS HOSPITALITY MGT T	0.7143
BS MED RECORD ADM	1.2698
BS NUCLEAR MEDICINE	0.4762
BS PRINTING MGMT	0.6349
BS SOCIAL WORK	4.3651
BUS ECON TRANSFER	0.0794
BUSINESS AD TRANSFER	1.0317
BUSINESS ADMIN	3.254
BUSINESS ECONOMICS	0.1587
BUSINESS ED	1.9841
CERTIFICATION	0.4762
CHILD DEVELOPMENT	0.0794
COMP INFO SYS 4YR	1.8254
COMP INFO SYS 4YR T	1.5079
COMP INFO SYS ACCT 4	0.3968
COMP INFO SYS MGT 4	0.6349
COMP INFO SYS MKTG 4	0.0794
CONST ENG TECH 2YR	0.2381
CONSTRUCT MGMT 4YR	0.4762
COURT/FREELANCE RPTG	0.9524
CRIMINAL JUSTICE 4YR	2.6984
DENTAL ASSISTANT	0.0794
DENTAL HYGIENE	1.0317
DENTAL TECHNOLOGY	0.7937
DIVERSIFIED BUSINESS	0.1587
ELEC/E'TRON ENG TECH	1.1111
ENERGY MANAGEMENT	0.9524
EVENING COLLEGE	0.3175
FINANCE 4YR	0.5556
FINANCE 4YR XFR	0.0794
FOOD SERVICE MGMT	1.2698
GENERAL STUDIES	1.9048

Full-Time Enrollment, Nontraditional Students -- Page 2

HEALTH SYSTEMS MGT	1.0317
HEAT REF & AIR COND	1.2698
HEAVY EQUIP SERVICE	0.873
IND & ENV HEALTH MGT	2.4603
IND CHEMICAL TECH	0.1587
IND ELECTRONICS TECH	1.5873
INS/REAL ESTATE 4YR	0.2381
INSURANCE 4YR	0.3175
INSURANCE 4YR XFR	0.2381
INTENSIV ENGLISH PRO	2.0635
INTERNATL BUS XFR	0.1587
INTRNTL BUSINESS 4YR	0.2381
JOURNALISM ASSOCIATE	0.0794
LEGAL ASSISTANT	0.4762
MACHINE TOOL	0.1587
MANAGEMENT 4YR	0.4762
MANAGEMENT TRANSFER	0.3968
MANUFACT ENGIN TECH	0.873
MANUFACTURING TECH	0.0794
MARKETING 4YR	1.0317
MARKETING PGM 4YR	1.6667
MARKETING PTM 4YR	0.3175
MARKETING RETAIL	0.2381
MARKETING RETAIL XFR	0.1587
MARKETING SALES	0.6349
MARKETING SALES XFR	0.3175
MARKETING TRANSFER	0.4762
MASTER/ACCOUNTANCY	0.3175
MATHEMATICS EDUC	1.1905
MECHANICAL ENG TECH	0.3175
MEDICAL LAB TECH 2YR	0.0794
MEDICAL RECORDS TECH	0.7143
MEDICAL TECHNOLOGY	0.6349
MS COMP INFO SYS MGT	0.2381
MS OCCUPATIONAL EDUC	0.1587
MSOE PROVISIONAL	0.1587
NUCLEAR MEDICINE 2YR	0.3968
NURSING 2YR	1.0317
NURSING 4YR	0.1587
OD OPTOMETRY	5.0794
OFFICE ADM EX SECTY	0.0794
OPTICIANRY	0.7143
OPTOMETRIC TECH	0.1587
ORNAMENTAL HORT 2YR	0.2381
PER MGT/IND REL XFR	0.1587
PER MGT/IND RLTION	0.3968
PHARMACY	8.4921
PLASTICS ENG TECH	0.9524
PLASTICS TECHNOLOGY	0.9524
PRE-ARTS	0.5556
PRE-ENG	0.2381
PRE-LAW	0.0794
PRE-MEDICINE	0.1587
PRE-MORTUARY SCI	0.0794
PRE-OPTOMETRY	0.3175
PRE-PHARMACY	0.873
PRE-SCIENCE	0.3968
PRE-TEACHING ELEM	0.1587
PRE-TEACHING SEC	0.2381
PRINTING	0.6349

PROD DESIGN ENG TECH	0.4762
PRODUCTION MGT 4YR	0.2381
PRODUCTION MGT XFR	0.3968
PUBLIC RELATIONS	0.1587
QNT BUSINESS	0.2381
RADIOGRAPHY	1.0317
REAL ESTATE 2YR	0.1587
REC LEADERSHIP & MGT	0.7143
RESPIRATORY THERAPY	0.1587
RET FASHN MERCH 2YR	0.1587
SCIENCE ED	0.9524
SML BUSINESS MGT	0.3175
SML BUSINESS MGT XFR	0.2381
SURVEYING 4YR	1.746
SURVEYING TECH 2YR	0.2381
TECH COMMUNICATIONS	0.3968
TECH ILLUSTRATION	0.3175
TECHNICAL DRAFTING	0.1587
TECHNICAL EDUCATION	1.1905
TRAINING-BUS & IND	0.0794
TV PRODUCTION	1.5079
UNDECLARED MAJOR	0.1587
VISUAL COMMUNICA-2YR	0.3175
VISUAL COMMUNICA-4YR	0.3175
WAGE EARN HOME ECON	0.2381
WELDING ENG TECH	0.3968
WELDING TECHNOLOGY	0.4762
ALL	100

Headcount Students @ FSU
Traditional Students
Full-Time Enrollment

```
Summary: @COUNT    Field:   BIRTHYR
Rows: CURRIC_NAM   Columns:
                         ALL
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 ACCOUNT FINANCE 4 YR       49
 ACCOUNTING 4YR            280
 ACCOUNTING 4YR XFR         18
 ADM ASSISTANT 2YR          32
 ADMINISTRAT SERVS T         3
 ADMINISTRATIVE SERVS       23
 ADVERTISING               160
 ADVERTISING TRANSFER       17
 AERIAL MAPPING TECH         5
 APPLIED BIOLOGY 4YR        81
 APPLIED MATHEMATICS        18
 ARCHITECT TECH            153
 AUDIOVISUAL PROD 2YR       88
 AUTO & H/E MGMT 4YR       100
 AUTO BODY                  41
 AUTO MACHINE               32
 AUTO SERVICE              187
 AVIONICS                    3
 BIOTECHNOLOGY               5
 BLDG CONST TECH            80
 BS HOSPITALITY MGT T       30
 BS MED RECORD ADM          44
 BS NUCLEAR MEDICINE         9
 BS PRINTING MGMT           41
 BS SOCIAL WORK            201
 BUS ECON TRANSFER           1
 BUSINESS AD TRANSFER       56
 BUSINESS ADMIN            567
 BUSINESS ECONOMICS         11
 BUSINESS ED                75
 CERTIFICATION               1
 CHILD DEVELOPMENT          52
 COMP INFO SYS 4YR         148
 COMP INFO SYS 4YR T        25
 COMP INFO SYS ACCT 4       51
 COMP INFO SYS MGT 4        57
 COMP INFO SYS MKTG 4       24
 CONST ENG TECH 2YR         26
 CONSTRUCT MGMT 4YR         31
 COURT/FREELANCE RPTG       62
 CRIMINAL JUSTICE 4YR      497
 DENTAL ASSISTANT           25
 DENTAL HYGIENE             90
 DENTAL TECHNOLOGY          33
 DIVERSIFIED BUSINESS       57
 ELEC/E'TRON ENG TECH       40
 ENERGY MANAGEMENT          16
 EVENING COLLEGE             6
 FACILITY MANAGEMENT        12
 FINANCE 4YR                45
 FINANCE 4YR XFR            13
 FOOD SERVICE MGMT         156
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Full-Time Enrollment, Traditional Students -- Page 2

GENERAL STUDIES	442
HEALTH SYSTEMS MGT	35
HEAT REF & AIR COND	87
HEAVY DUTY ENGINE	12
HEAVY EQUIP SERVICE	79
IND & ENV HEALTH MGT	52
IND CHEMICAL TECH	20
IND ELECTRONICS TECH	112
INS/REAL ESTATE 4YR	24
INSURANCE 4YR	30
INSURANCE 4YR XFR	2
INTENSIV ENGLISH PRO	23
INTERNATL BUS XFR	1
INTRNTL BUSINESS 4YR	36
JOURNALISM ASSOCIATE	69
LEGAL ASSISTANT	54
MACHINE TOOL	62
MANAGEMENT 4YR	237
MANAGEMENT TRANSFER	21
MANUFACT ENGIN TECH	35
MARKETING 4YR	198
MARKETING PGM 4YR	150
MARKETING PTM 4YR	48
MARKETING RETAIL	44
MARKETING RETAIL XFR	5
MARKETING SALES	90
MARKETING SALES XFR	19
MARKETING TRANSFER	18
MASTER/ACCOUNTANCY	2
MATHEMATICS EDUC	42
MECHANICAL ENG TECH	50
MEDICAL LAB TECH 2YR	17
MEDICAL RECORDS TECH	44
MEDICAL TECHNOLOGY	40
NUCLEAR MEDICINE 2YR	34
NURSING 2YR	37
NURSING 4YR	3
OD OPTOMETRY	61
OFF ADM LEGAL OPT	19
OFFICE ADM EX SECTY	37
OPTICIANRY	20
OPTOMETRIC TECH	22
ORNAMENTAL HORT 2YR	20
PER MGT/IND REL XFR	3
PER MGT/IND RLTION	19
PHARMACY	264
PLASTICS ENG TECH	67
PLASTICS TECHNOLOGY	144
PRE-ARTS	235
PRE-DENTISTRY	29
PRE-ENG	50
PRE-LAW	70
PRE-MEDICINE	47
PRE-MORTUARY SCI	14
PRE-OPTOMETRY	123
PRE-PHARMACY	286
PRE-SCIENCE	104
PRE-TEACHING ELEM	92
PRE-TEACHING SEC	48
PRE-VETERINARY SCI	13

PRINTING	147
PROD DESIGN ENG TECH	29
PRODUCTION MGT 4YR	21
PRODUCTION MGT XFR	25
PUBLIC RELATIONS	54
PUBLIC RELATIONS XFR	7
QNT BUS TRANSFER	2
QNT BUSINESS	3
RADIOGRAPHY	72
REAL ESTATE 2YR	17
REC LEADERSHIP & MGT	67
RESPIRATORY THERAPY	20
RET FASHN MERCH 2YR	75
SCIENCE ED	48
SML BUSINESS MGT	55
SML BUSINESS MGT XFR	11
SURVEYING 4YR	33
SURVEYING TECH 2YR	6
TECH COMMUNICATIONS	6
TECH ILLUSTRATION	47
TECHNICAL DRAFTING	88
TECHNICAL EDUCATION	19
TV PRODUCTION	63
VISUAL COMMUNICA-2YR	140
VISUAL COMMUNICA-4YR	16
WELDING ENG TECH	23
WELDING TECHNOLOGY	53
ALL	9085

Headcount Students @ FSU
Traditional Students
Full-Time Enrollment

```
Summary: @COUNT    Field:    BIRTHYR
Rows: CURRIC_NAM   Columns:
 % Column                   ALL
                           ------
 ACCOUNT FINANCE 4 YR      0.5394
 ACCOUNTING 4YR             3.082
 ACCOUNTING 4YR XFR        0.1981
 ADM ASSISTANT 2YR         0.3522
 ADMINISTRAT SERVS T        0.033
 ADMINISTRATIVE SERVS      0.2532
 ADVERTISING               1.7611
 ADVERTISING TRANSFER      0.1871
 AERIAL MAPPING TECH        0.055
 APPLIED BIOLOGY 4YR       0.8916
 APPLIED MATHEMATICS       0.1981
 ARCHITECT TECH            1.6841
 AUDIOVISUAL PROD 2YR      0.9686
 AUTO & H/E MGMT 4YR       1.1007
 AUTO BODY                 0.4513
 AUTO MACHINE              0.3522
 AUTO SERVICE              2.0583
 AVIONICS                   0.033
 BIOTECHNOLOGY              0.055
 BLDG CONST TECH           0.8806
 BS HOSPITALITY MGT T      0.3302
 BS MED RECORD ADM         0.4843
 BS NUCLEAR MEDICINE       0.0991
 BS PRINTING MGMT          0.4513
 BS SOCIAL WORK            2.2124
 BUS ECON TRANSFER          0.011
 BUSINESS AD TRANSFER      0.6164
 BUSINESS ADMIN            6.2411
 BUSINESS ECONOMICS        0.1211
 BUSINESS ED               0.8255
 CERTIFICATION              0.011
 CHILD DEVELOPMENT         0.5724
 COMP INFO SYS 4YR         1.6291
 COMP INFO SYS 4YR T       0.2752
 COMP INFO SYS ACCT 4      0.5614
 COMP INFO SYS MGT 4       0.6274
 COMP INFO SYS MKTG 4      0.2642
 CONST ENG TECH 2YR        0.2862
 CONSTRUCT MGMT 4YR        0.3412
 COURT/FREELANCE RPTG      0.6824
 CRIMINAL JUSTICE 4YR      5.4706
 DENTAL ASSISTANT          0.2752
 DENTAL HYGIENE            0.9906
 DENTAL TECHNOLOGY         0.3632
 DIVERSIFIED BUSINESS      0.6274
 ELEC/E'TRON ENG TECH      0.4403
 ENERGY MANAGEMENT         0.1761
 EVENING COLLEGE            0.066
 FACILITY MANAGEMENT       0.1321
 FINANCE 4YR               0.4953
 FINANCE 4YR XFR           0.1431
 FOOD SERVICE MGMT         1.7171
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GENERAL STUDIES	4.8652
HEALTH SYSTEMS MGT	0.3853
HEAT REF & AIR COND	0.9576
HEAVY DUTY ENGINE	0.1321
HEAVY EQUIP SERVICE	0.8696
IND & ENV HEALTH MGT	0.5724
IND CHEMICAL TECH	0.2201
IND ELECTRONICS TECH	1.2328
INS/REAL ESTATE 4YR	0.2642
INSURANCE 4YR	0.3302
INSURANCE 4YR XFR	0.022
INTENSIV ENGLISH PRO	0.2532
INTERNATL BUS XFR	0.011
INTRNTL BUSINESS 4YR	0.3963
JOURNALISM ASSOCIATE	0.7595
LEGAL ASSISTANT	0.5944
MACHINE TOOL	0.6824
MANAGEMENT 4YR	2.6087
MANAGEMENT TRANSFER	0.2312
MANUFACT ENGIN TECH	0.3853
MARKETING 4YR	2.1794
MARKETING PGM 4YR	1.6511
MARKETING PTM 4YR	0.5283
MARKETING RETAIL	0.4843
MARKETING RETAIL XFR	0.055
MARKETING SALES	0.9906
MARKETING SALES XFR	0.2091
MARKETING TRANSFER	0.1981
MASTER/ACCOUNTANCY	0.022
MATHEMATICS EDUC	0.4623
MECHANICAL ENG TECH	0.5504
MEDICAL LAB TECH 2YR	0.1871
MEDICAL RECORDS TECH	0.4843
MEDICAL TECHNOLOGY	0.4403
NUCLEAR MEDICINE 2YR	0.3742
NURSING 2YR	0.4073
NURSING 4YR	0.033
OD OPTOMETRY	0.6714
OFF ADM LEGAL OPT	0.2091
OFFICE ADM EX SECTY	0.4073
OPTICIANRY	0.2201
OPTOMETRIC TECH	0.2422
ORNAMENTAL HORT 2YR	0.2201
PER MGT/IND REL XFR	0.033
PER MGT/IND RLTION	0.2091
PHARMACY	2.9059
PLASTICS ENG TECH	0.7375
PLASTICS TECHNOLOGY	1.585
PRE-ARTS	2.5867
PRE-DENTISTRY	0.3192
PRE-ENG	0.5504
PRE-LAW	0.7705
PRE-MEDICINE	0.5173
PRE-MORTUARY SCI	0.1541
PRE-OPTOMETRY	1.3539
PRE-PHARMACY	3.148
PRE-SCIENCE	1.1447
PRE-TEACHING ELEM	1.0127
PRE-TEACHING SEC	0.5283
PRE-VETERINARY SCI	0.1431

PRINTING	1.6181
PROD DESIGN ENG TECH	0.3192
PRODUCTION MGT 4YR	0.2312
PRODUCTION MGT XFR	0.2752
PUBLIC RELATIONS	0.5944
PUBLIC RELATIONS XFR	0.0771
QNT BUS TRANSFER	0.022
QNT BUSINESS	0.033
RADIOGRAPHY	0.7925
REAL ESTATE 2YR	0.1871
REC LEADERSHIP & MGT	0.7375
RESPIRATORY THERAPY	0.2201
RET FASHN MERCH 2YR	0.8255
SCIENCE ED	0.5283
SML BUSINESS MGT	0.6054
SML BUSINESS MGT XFR	0.1211
SURVEYING 4YR	0.3632
SURVEYING TECH 2YR	0.066
TECH COMMUNICATIONS	0.066
TECH ILLUSTRATION	0.5173
TECHNICAL DRAFTING	0.9686
TECHNICAL EDUCATION	0.2091
TV PRODUCTION	0.6935
VISUAL COMMUNICA-2YR	1.541
VISUAL COMMUNICA-4YR	0.1761
WELDING ENG TECH	0.2532
WELDING TECHNOLOGY	0.5834
ALL	100

Headcount Students @ FSU
NonTraditional Students
Part-Time Enrollment

```
Summary: @COUNT    Field:   BIRTHYR
Rows: CURRIC_NAM   Columns:
                          ALL
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 ACCELERATED BUSINESS         1
 ACCOUNT FINANCE 4 YR         1
 ACCOUNTING 4YR              32
 ACCOUNTING 4YR XFR           1
 ADM ASSISTANT 2YR            3
 ADMINISTRAT SERVS T          2
 ADMINISTRATIVE SERVS         5
 ADVERTISING                  1
 ALLIED HEALTH ED             9
 ARCHITECT TECH               1
 AUDIOVISUAL PROD 2YR         1
 AUTO & H/E MGMT 4YR          2
 AUTO SERVICE                 3
 BLDG CONST TECH              1
 BS HOSPITALITY MGT T         2
 BS MED RECORD ADM           22
 BS SOCIAL WORK               8
 BUSINESS AD TRANSFER         3
 BUSINESS ADMIN             124
 BUSINESS ED                 14
 CERTIFICATION                6
 CHILD DEVELOPMENT            2
 COMM SCH EDUC/REC            1
 COMP INFO SYS 4YR            7
 COMP INFO SYS 4YR T          5
 COMP INFO SYS ACCT 4         1
 COURT/FREELANCE RPTG         1
 CRIMINAL JUSTICE 4YR         2
 DENTAL ASSISTANT             2
 DENTAL TECHNOLOGY            5
 DIVERSIFIED BUSINESS         1
 ENERGY MANAGEMENT            1
 EVENING COLLEGE            154
 EXD HEALTH SYS MGMT         25
 EXD UNDECLARED MAJOR         1
 FOOD SERVICE MGMT            2
 GENERAL STUDIES              8
 HEALTH SYSTEMS MGT           1
 HEAT REF & AIR COND          1
 HEAVY EQUIP SERVICE          1
 IND & ENV HEALTH MGT         5
 INTENSIV ENGLISH PRO         1
 INTRNTL BUSINESS 4YR         1
 LEGAL ASSISTANT              4
 MANAGEMENT 4YR               3
 MANAGEMENT TRANSFER          1
 MANUFACT ENGIN TECH         21
 MANUFACTURING TECH           5
 MARKETING 4YR                1
 MARKETING PGM 4YR           27
 MARKETING PTM 4YR            3
 MARKETING SALES              2
```

Part-Time Enrollment, Nontraditional Students -- Page 2

MASTER/ACCOUNTANCY	3
MATHEMATICS EDUC	4
MECHANICAL ENG TECH	1
MEDICAL LAB TECH 2YR	1
MEDICAL RECORDS TECH	1
MS CISM CONDITIONAL	13
MS COMP INFO SYS MGT	11
MS OCCUPATIONAL EDUC	28
MSOE PROVISIONAL	15
NURSING 2YR	4
NURSING 4YR	151
OFFICE ADM EX SECTY	1
ORNAMENTAL HORT 2YR	2
PER MGT/IND REL XFR	3
PER MGT/IND RLTION	1
PHARMACY	6
PLASTICS ENG TECH	1
PLASTICS TECHNOLOGY	5
PRE-ARTS	1
PRE-PHARMACY	2
PRE-SCIENCE	6
PRE-TEACHING ELEM	1
PRE-VETERINARY SCI	1
PRINTING	3
PRODUCTION MGT 4YR	2
PUBLIC RELATIONS XFR	1
REAL ESTATE 2YR	1
REC LEADERSHIP & MGT	1
SCIENCE ED	2
SURVEYING 4YR	4
TECH COMMUNICATIONS	2
TECHNICAL EDUCATION	22
TRAINING-BUS & IND	1
UNDECLARED MAJOR	194
VISUAL COMMUNICA-4YR	1
WAGE EARN HOME ECON	7
WELDING ENG TECH	1
ALL	1041

Headcount Students @ FSU
NonTraditional Students
Part-Time Enrollment

Summary: @COUNT Field: BIRTHYR
Rows: CURRIC_NAM Columns:

% Column	ALL
ACCELERATED BUSINESS	0.0961
ACCOUNT FINANCE 4 YR	0.0961
ACCOUNTING 4YR	3.074
ACCOUNTING 4YR XFR	0.0961
ADM ASSISTANT 2YR	0.2882
ADMINISTRAT SERVS T	0.1921
ADMINISTRATIVE SERVS	0.4803
ADVERTISING	0.0961
ALLIED HEALTH ED	0.8646
ARCHITECT TECH	0.0961
AUDIOVISUAL PROD 2YR	0.0961
AUTO & H/E MGMT 4YR	0.1921
AUTO SERVICE	0.2882
BLDG CONST TECH	0.0961
BS HOSPITALITY MGT T	0.1921
BS MED RECORD ADM	2.1134
BS SOCIAL WORK	0.7685
BUSINESS AD TRANSFER	0.2882
BUSINESS ADMIN	11.912
BUSINESS ED	1.3449
CERTIFICATION	0.5764
CHILD DEVELOPMENT	0.1921
COMM SCH EDUC/REC	0.0961
COMP INFO SYS 4YR	0.6724
COMP INFO SYS 4YR T	0.4803
COMP INFO SYS ACCT 4	0.0961
COURT/FREELANCE RPTG	0.0961
CRIMINAL JUSTICE 4YR	0.1921
DENTAL ASSISTANT	0.1921
DENTAL TECHNOLOGY	0.4803
DIVERSIFIED BUSINESS	0.0961
ENERGY MANAGEMENT	0.0961
EVENING COLLEGE	14.793
EXD HEALTH SYS MGMT	2.4015
EXD UNDECLARED MAJOR	0.0961
FOOD SERVICE MGMT	0.1921
GENERAL STUDIES	0.7685
HEALTH SYSTEMS MGT	0.0961
HEAT REF & AIR COND	0.0961
HEAVY EQUIP SERVICE	0.0961
IND & ENV HEALTH MGT	0.4803
INTENSIV ENGLISH PRO	0.0961
INTRNTL BUSINESS 4YR	0.0961
LEGAL ASSISTANT	0.3842
MANAGEMENT 4YR	0.2882
MANAGEMENT TRANSFER	0.0961
MANUFACT ENGIN TECH	2.0173
MANUFACTURING TECH	0.4803
MARKETING 4YR	0.0961
MARKETING PGM 4YR	2.5937
MARKETING PTM 4YR	0.2882
MARKETING SALES	0.1921

Part-Time Enrollment, Nontraditional Students -- Page 2

MASTER/ACCOUNTANCY	0.2882
MATHEMATICS EDUC	0.3842
MECHANICAL ENG TECH	0.0961
MEDICAL LAB TECH 2YR	0.0961
MEDICAL RECORDS TECH	0.0961
MS CISM CONDITIONAL	1.2488
MS COMP INFO SYS MGT	1.0567
MS OCCUPATIONAL EDUC	2.6897
MSOE PROVISIONAL	1.4409
NURSING 2YR	0.3842
NURSING 4YR	14.505
OFFICE ADM EX SECTY	0.0961
ORNAMENTAL HORT 2YR	0.1921
PER MGT/IND REL XFR	0.2882
PER MGT/IND RLTION	0.0961
PHARMACY	0.5764
PLASTICS ENG TECH	0.0961
PLASTICS TECHNOLOGY	0.4803
PRE-ARTS	0.0961
PRE-PHARMACY	0.1921
PRE-SCIENCE	0.5764
PRE-TEACHING ELEM	0.0961
PRE-VETERINARY SCI	0.0961
PRINTING	0.2882
PRODUCTION MGT 4YR	0.1921
PUBLIC RELATIONS XFR	0.0961
REAL ESTATE 2YR	0.0961
REC LEADERSHIP & MGT	0.0961
SCIENCE ED	0.1921
SURVEYING 4YR	0.3842
TECH COMMUNICATIONS	0.1921
TECHNICAL EDUCATION	2.1134
TRAINING-BUS & IND	0.0961
UNDECLARED MAJOR	18.636
VISUAL COMMUNICA-4YR	0.0961
WAGE EARN HOME ECON	0.6724
WELDING ENG TECH	0.0961
ALL	100

```
                                   Headcount Students @ FSU
                                     Traditional Students
                                     Part-Time Enrollment

Summary: @COUNT    Field:   BIRTHYR
Rows: CURRIC_NAM   Columns:
                       ALL
                      ------
 ACCOUNT FINANCE 4 YR      1
 ACCOUNTING 4YR           10
 ACCOUNTING 4YR XFR        1
 ADM ASSISTANT 2YR         2
 ADVERTISING               4
 APPLIED BIOLOGY 4YR       3
 APPLIED MATHEMATICS       1
 ARCHITECT TECH            5
 AUDIOVISUAL PROD 2YR      6
 AUTO & H/E MGMT 4YR       6
 AUTO BODY                 1
 AUTO SERVICE              4
 BLDG CONST TECH           6
 BS HOSPITALITY MGT T      2
 BS MED RECORD ADM         2
 BS PRINTING MGMT          2
 BS SOCIAL WORK            3
 BUSINESS AD TRANSFER      1
 BUSINESS ADMIN           27
 BUSINESS ED               1
 CHILD DEVELOPMENT         2
 COMP INFO SYS 4YR         5
 COMP INFO SYS ACCT 4      1
 CONST ENG TECH 2YR        1
 COURT/FREELANCE RPTG      4
 CRIMINAL JUSTICE 4YR     11
 DENTAL HYGIENE            3
 DIVERSIFIED BUSINESS      3
 EVENING COLLEGE          43
 FACILITY MANAGEMENT       1
 FINANCE 4YR               1
 FOOD SERVICE MGMT        11
 GENERAL STUDIES          20
 HEALTH SYSTEMS MGT        1
 HEAT REF & AIR COND       4
 HEAVY EQUIP SERVICE       1
 IND & ENV HEALTH MGT      2
 IND ELECTRONICS TECH      5
 INSURANCE 4YR             1
 INTRNTL BUSINESS 4YR      1
 JOURNALISM ASSOCIATE      3
 LEGAL ASSISTANT           1
 MANAGEMENT 4YR            6
 MANUFACT ENGIN TECH       4
 MARKETING 4YR             9
 MARKETING PGM 4YR       130
 MARKETING PTM 4YR         4
 MARKETING RETAIL          3
 MARKETING SALES           1
 MASTER/ACCOUNTANCY        1
 MATHEMATICS EDUC          2
 MECHANICAL ENG TECH       1
```

Part-Time Enrollment, Traditional Students -- Page 2

MEDICAL RECORDS TECH	1
MEDICAL TECHNOLOGY	2
MS CISM CONDITIONAL	1
NURSING 2YR	2
NURSING 4YR	2
OFF ADM LEGAL OPT	1
OPTICIANRY	1
OPTOMETRIC TECH	1
ORNAMENTAL HORT 2YR	3
PHARMACY	3
PLASTICS ENG TECH	4
PLASTICS TECHNOLOGY	7
PRE-ARTS	7
PRE-ENG	1
PRE-LAW	1
PRE-OPTOMETRY	3
PRE-PHARMACY	6
PRE-SCIENCE	6
PRE-TEACHING ELEM	5
PRE-TEACHING SEC	5
PRINTING	5
PRODUCTION MGT XFR	1
PUBLIC RELATIONS	1
RADIOGRAPHY	1
REAL ESTATE 2YR	1
REC LEADERSHIP & MGT	3
RESPIRATORY THERAPY	2
RET FASHN MERCH 2YR	7
SCIENCE ED	1
SML BUSINESS MGT	3
SURVEYING 4YR	1
TECH COMMUNICATIONS	3
TV PRODUCTION	1
UNDECLARED MAJOR	18
VISUAL COMMUNICA-2YR	6
WELDING TECHNOLOGY	2
ALL	492

```
                                   Headcount Students @ FSU
                                     Traditional Students
                                     Part-Time Enrollment

     Summary: @COUNT    Field:   BIRTHYR
     Rows: CURRIC_NAM   Columns:
      % Column                ALL
                              ------
      ACCOUNT FINANCE 4 YR    0.2033
      ACCOUNTING 4YR          2.0325
      ACCOUNTING 4YR XFR      0.2033
      ADM ASSISTANT 2YR       0.4065
      ADVERTISING              0.813
      APPLIED BIOLOGY 4YR     0.6098
      APPLIED MATHEMATICS     0.2033
      ARCHITECT TECH          1.0163
      AUDIOVISUAL PROD 2YR    1.2195
      AUTO & H/E MGMT 4YR     1.2195
      AUTO BODY               0.2033
      AUTO SERVICE             0.813
      BLDG CONST TECH         1.2195
      BS HOSPITALITY MGT T    0.4065
      BS MED RECORD ADM       0.4065
      BS PRINTING MGMT        0.4065
      BS SOCIAL WORK          0.6098
      BUSINESS AD TRANSFER    0.2033
      BUSINESS ADMIN          5.4878
      BUSINESS ED             0.2033
      CHILD DEVELOPMENT       0.4065
      COMP INFO SYS 4YR       1.0163
      COMP INFO SYS ACCT 4    0.2033
      CONST ENG TECH 2YR      0.2033
      COURT/FREELANCE RPTG     0.813
      CRIMINAL JUSTICE 4YR    2.2358
      DENTAL HYGIENE          0.6098
      DIVERSIFIED BUSINESS    0.6098
      EVENING COLLEGE         8.7398
      FACILITY MANAGEMENT     0.2033
      FINANCE 4YR             0.2033
      FOOD SERVICE MGMT       2.2358
      GENERAL STUDIES          4.065
      HEALTH SYSTEMS MGT      0.2033
      HEAT REF & AIR COND      0.813
      HEAVY EQUIP SERVICE     0.2033
      IND & ENV HEALTH MGT    0.4065
      IND ELECTRONICS TECH    1.0163
      INSURANCE 4YR           0.2033
      INTRNTL BUSINESS 4YR    0.2033
      JOURNALISM ASSOCIATE    0.6098
      LEGAL ASSISTANT         0.2033
      MANAGEMENT 4YR          1.2195
      MANUFACT ENGIN TECH      0.813
      MARKETING 4YR           1.8293
      MARKETING PGM 4YR       26.423
      MARKETING PTM 4YR        0.813
      MARKETING RETAIL        0.6098
      MARKETING SALES         0.2033
      MASTER/ACCOUNTANCY      0.2033
      MATHEMATICS EDUC        0.4065
      MECHANICAL ENG TECH     0.2033
```

Part-Time Enrollment, Traditional Students -- Page 2

MEDICAL RECORDS TECH	0.2033
MEDICAL TECHNOLOGY	0.4065
MS CISM CONDITIONAL	0.2033
NURSING 2YR	0.4065
NURSING 4YR	0.4065
OFF ADM LEGAL OPT	0.2033
OPTICIANRY	0.2033
OPTOMETRIC TECH	0.2033
ORNAMENTAL HORT 2YR	0.6098
PHARMACY	0.6098
PLASTICS ENG TECH	0.813
PLASTICS TECHNOLOGY	1.4228
PRE-ARTS	1.4228
PRE-ENG	0.2033
PRE-LAW	0.2033
PRE-OPTOMETRY	0.6098
PRE-PHARMACY	1.2195
PRE-SCIENCE	1.2195
PRE-TEACHING ELEM	1.0163
PRE-TEACHING SEC	1.0163
PRINTING	1.0163
PRODUCTION MGT XFR	0.2033
PUBLIC RELATIONS	0.2033
RADIOGRAPHY	0.2033
REAL ESTATE 2YR	0.2033
REC LEADERSHIP & MGT	0.6098
RESPIRATORY THERAPY	0.4065
RET FASHN MERCH 2YR	1.4228
SCIENCE ED	0.2033
SML BUSINESS MGT	0.6098
SURVEYING 4YR	0.2033
TECH COMMUNICATIONS	0.6098
TV PRODUCTION	0.2033
UNDECLARED MAJOR	3.6585
VISUAL COMMUNICA-2YR	1.2195
WELDING TECHNOLOGY	0.4065
ALL	100

APPENDIX E

DETAILED RESPONSES TO QUESTIONNAIRE

Responses to Questionnaire

There was a one hundred percent return rate on the questionnaire. Responses were received from the director of public relations, the registrar, the faculty advisor of the nontraditional student organization, the dean of enrollment services, the assistant dean of the Gerholz Institute for Lifelong Learning, the director of the collegiate skills program, and the dean of the library.

Item #1

The first item referred to Ackell's (1982) three stages of adaptation that institutions proceed through when accommodating nontraditional students. Stage one is the laissez-faire stage, stage two is the separatist stage, and stage three is the equity stage. Respondents were asked to read three paragraphs describing the three stages.

In response to question one, "After reading the praragraphs below, in your opinion which stage best describes the position of Ferris relative to students over the age of twenty-five?," three responded stage one, two responded stage two, and one responded stage three. The seventh respondent indicated that Ferris is partially in stage one and partially in stage three.

One respondent made a comment concerning Ackell's stages of adaptation: "Very artificial construct in Askell's trinity or a poor conceptualization of its use -- these 'stages' may not be sequential."

Item #2

The second item on the questionnaire was "Please give two or three reasons why you selected the response that you did to question number one." A complete listing of the responses given are shown below.

1. Stage One: There is a system that works neither for or against. No special support services, no faculty development efforts, etc.

2. Stage One: Instructional support provided without age discrimination; there haven't been any barriers to remove. Programs know best, appear "equitable."

3. Stage One: While some efforts over the years have resulted in special programming -- workshops, advising, etc. -- there is no doubt that the nontraditional student is, at Ferris, offered only those services offered other students. We have not adapted to the "new traditional" student in many ways.

4. Stage Two: The separatist stage best describes the level of Gerholz involvement and services at the present time. Portions of the equity stage exist in

beginning form such as telephone and mail registration. Full recruitment, staff support and integrated curriculum do not exist.

5. Stage Two: Off-campus classes for adults generally must "pay for themselves" from tuition revenue alone. Grand Rapids Applied Technology Center and other off-campus activities not on same stage.

6. Stage Three: Gerholz provides an outreach program to adult learners for both on-campus and off-campus offerings as well as an external degree program. Strong support services are provided to these individuals including a toll-free number.

7. Stage One and Three: Mostly laissez-faire but FSU administrators are aware of adult students, degree credits from prior learning are available and adult students are registered by phone. But, few student support services are available at convenient times; faculty have no special training to address adult students, potential concern.

Item #3

Item number three asked "Does your office or department provide services specifically geared to the needs of students aged twenty-five and older? If yes, please indicate several of the most important services." Five of the respondents indicated that their offices or departments provided services specifically geared to the adult learner. Two respondents indicated that their offices or departments did not. Those who responded yes, listed the following services:

1. Admission processing and admission counseling on programs and services.

2. Need-based financial aid as permitted by federal and state (not Ferris State) regulations; including direction and support for social service recipients.

3. Veterans affairs and benefits processing; evaluation of ACE recommended credits.

4. Assessment testing, GED testing, challenge exams.

5. Placement services and credentials counseling.

6. Not specifically geared, but library hours, etc. are set to accomodate nontraditional 8-5 M-F hours; but population characteristics and actual use dictate the provision of service extension of hours, etc. are costly decisions.

7. Our classroom materials and workshops have components which include nontraditional student activities. These are, however, interwoven into regular offerings. There are times our workshops are focused for nontraditional students.

8. Traditional registrar services are provided to all adult learners. Special registration procedures are

administered through Gerholz to permit the adult learner to be both admitted and registered on site. Mail registration is also available in some programs. On-campus students receive the services provided all students.

9. Recruitment, marketing, registration, logistical support, and institutional advocacy.

10. We publicize the graduation of students at off-campus sites separately from routine publicity for on-campus graduates. Also, we promote the offering of courses/programs at off-campus sites for part-time, mainly adult learners.

Item #4

The item asked: "In your opinion, what additional things could Ferris be doing to assist students aged twenty-five and older to pursue their studies?" Replies included:

1. Fully implement the programming scheduled for the Applied Technology Center in Grand Rapids.
2. Offer evening and weekend course selections.
3. Strengthen corporation and nontraditional student recruitment activities.
4. Administratively decide if Ferris State is/can agressively pursue an adult student population and fund accordingly.

5. Special support services, faculty development, orientation classes at varying times for varying periods, more practice in most areas.

6. I am not convinced that equity means customized assistance. Ackell's stage three description does not describe equity but preference and affirmative action. Such customization is costly and could be supported if there were coterminous adjustment in revenues to fund such programs. But extension of access outside the library, etc. will benefit all users because of greater flexibility -- so a older student could customize service for him/herself.

7. Weekend college, offering first a two-year, then a four-year liberal arts degree. Flexible completion opportunities for independent classes. Specialized advising sessions. Child care arrangements.

8. Because of the nature of our off-campus and outreach programs, it is likely that more attention needs to be directed to personal services (e.g., career and financial planning).

9. Fund and staff the regional center in southeast Michigan (Flint). Fully support identified off-campus program. Develop and deliver appropriate support services for adult students on and off campus.

10. Hold Saturday/evening hours for support services.

11. Revise admissions/registration forms to provide address for publicity purposes chosen by student.

12. Organize social events for nontraditional students to meet each other and key faculty and administrators.

13. Publish services booklet for nontraditional students.

APPENDIX F

CONTENT ANALYSIS OF DOCUMENTS

SCHOOL OF TECHNOLOGY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\archtech         Problems marked/detected: 0/2

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  12        Number of paragraphs: 3
  Gunning's Fog Index:  21        Average length:  1.6 sentences
  Flesch-Kincaid Grade Level: 16

                      Sentence Statistics

  Number of sentences:  5               Passive voice:        0
  End with '?':         1               Short (< 14 words):   2
  End with '!':         0               Long  (> 30 words):   1
  Average length:       18.4 words

                       Word Statistics

  Number of words:      92              Syllables per word:   2.08
  Average length:       6.52 letters    Prepositions:         15

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ARCHITECTURAL TECHNOLOGY, School of Technology, AAS Degree

WHAT IS AN ARCHITECTURAL TECHNICIAN?

Architectural firms employ professionals, technicians and consultants to provide clients with a variety of services. The firms must develop building programs, preliminary designs, construction documents and provide observation service during construction.

The architectural technician plays a significant role in this process. As a trained technicain with a solid background in mathematics and physical science, the technician applies knowledge of construction material, structural and mechanical systems, and traditional as well as computer-assisted architectural drafting techniques to the development of construction documents for a wide range of building types.

SCHOOL OF TECHNOLOGY BROCHURE

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======================== Grammatik IV ===================

Summary for A:\archtec2        Problems marked/detected: 0/2

Readability Statistics         Paragraph Statistics

  Flesch Reading Ease:  0        Number of paragraphs: 2
  Gunning's Fog Index:  24       Average length:  2.0 sentences
  Flesch-Kincaid Grade Level: 20

                     Sentence Statistics

  Number of sentences:  4             Passive voice:          0
  End with '?':         0             Short (< 14 words):     0
  End with '!':         0             Long  (> 30 words):     0
  Average length:       23.5 words

                       Word Statistics

  Number of words:      94            Syllables per word: 2.21
  Average length:       6.41 letters  Prepositions:         16

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ARCHITECTURAL TECHNOLOGY, School of Technology, AAS Degree

CAREER OPPORTUNITIES

The increasing complexity of the building process and growth in non-residential construction are major factors in the growing demand for architectural services, and the accompanying need for architectural personnel.

There is no geographic limitation on employment opportunities, although the majority of architectural firms maintain offices in metropolitan areas. Advancement depends upon the technician's development of technical expertise, the ability to coordinate work with others and the desire for increased responsibility. An individual's aptitudes and interests can lead to specialization in other areas of architectural work such as building construction, material sales and building inspection.

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SCHOOL OF TECHNOLOGY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\machtool          Problems marked/detected: 0/3


Readability Statistics           Paragraph Statistics

  Flesch Reading Ease:  17         Number of paragraphs: 1
  Gunning's Fog Index:  20         Average length:  4.0 sentences
  Flesch-Kincaid Grade Level: 17


                          Sentence Statistics

  Number of sentences:  4               Passive voice:         2
  End with '?':         0               Short (< 14 words):    1
  End with '!':         0               Long  (> 30 words):    1
  Average length:       25.0 words


                            Word Statistics

  Number of words:      100             Syllables per word:    1.94
  Average length:       5.98 letters    Prepositions:          10


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MACHINE TOOL TECHNOLOGY, School of Technology, AAS Degree

FERRIS EQUIPMENT IS STATE-OF-THE-ART

Students in Ferris' two-year program obtain their skills through 1,040 hours of practice in laboratories equipped with machines used in industry. They learn to perform basic toolroom operations on lathes, mills, grinders and drilling machines; use precision and non-precision measuring tools; perform basic heat treatment operations on steel; program and operate computer numerical control machine tools; operate tracer machines and electrical discharge machines. Students also are taught how to read part prints, select material, lay out and plan machining operations, use a machinery handbook and basic shop mathematics. General education courses such as English, humanities and behavioral science also are studied.

SCHOOL OF TECHNOLOGY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\machtoo2         Problems marked/detected: 0/4

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  16        Number of paragraphs: 2
  Gunning's Fog Index:  24        Average length:  1.5 sentences
  Flesch-Kincaid Grade Level: 19

                        Sentence Statistics

  Number of sentences:  3                Passive voice:          0
  End with '?':         1                Short (< 14 words):     1
  End with '!':         0                Long  (> 30 words):     2
  Average length:       32.6 words

                         Word Statistics

  Number of words:      98               Syllables per word: 1.86
  Average length:       5.65 letters     Prepositions:         12

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MACHINE TOOL TECHNOLOGY, School of Technology, AAS Degree

WHERE CAN I GO FROM HERE?

Machine tool technology graduates who wish to continue their study may apply their skills toward a one year add-on assocaite degree in computer numerical control or a four-year degree in a variey of different areas. While the manufacturing engineering technology program would be the most natural extension, credits earned in the machine tool technology curriculum also transfer directly into 24 other programs, allowing the student to earn a bachelor of science degree with two more years of study. These programs inslude advertising, business, management, marketing, public relations, television production and trade technical education

SCHOOL OF BUSINESS BROCHURE

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=================== Grammatik IV ===================

Summary for A:\admnsvc2        Problems marked/detected: 0/3

Readability Statistics         Paragraph Statistics

  Flesch Reading Ease:  19       Number of paragraphs: 3
  Gunning's Fog Index:  17       Average length:  2.3 sentences
  Flesch-Kincaid Grade Level: 14

                      Sentence Statistics

  Number of sentences:  7              Passive voice:        0
  End with '?':         1              Short (< 14 words):   5
  End with '!':         0              Long  (> 30 words):   0
  Average length:       12.1 words

                        Word Statistics

  Number of words:      85             Syllables per word: 2.08
  Average length:       6.16 letters   Prepositions:         7


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ADMINISTRATIVE SERVICES, School of Business, BS Degree.

WHAT DOES FERRIS OFFER?

Ferris offers students three choices in the administrative services curriculum. Each is a four-year program, leading to a bachelor of science in business degree. The programs are administrative office management (Track A); secretarial administration (Track B); and office technology - records and word processing (Track C). Each program combines course work in office administration, general business studies and general education. Students also may participate in a cooperative educational program, receiving on-the-job training and academic credit.

SCHOOL OF BUSINESS BROCHURE

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================== Grammatik IV ===================

Summary for A:\admnsvc         Problems marked/detected: 0/3


Readability Statistics         Paragraph Statistics

  Flesch Reading Ease:  21       Number of paragraphs: 3
  Gunning's Fog Index:  20       Average length:  1.3 sentences
  Flesch-Kincaid Grade Level: 15


                       Sentence Statistics

  Number of sentences:  4              Passive voice:        0
  End with '?':         0              Short (< 14 words):   1
  End with '!':         0              Long  (> 30 words):   1
  Average length:       19.7 words


                         Word Statistics

  Number of words:      79             Syllables per word: 1.96
  Average length:       5.79 letters   Prepositions:         16


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ADMINISTRATIVE SERVICES, School of Business, BS Degree.

OFFICE ADMINISTRATORS ARE IN DEMAND

As business grows increasingly complex, the need for office managers and secretaries will inevitably increase. Professionals trained in office technology and information management will be in demand everywhere in the country - from small towns to huge cities and in every kind of business, governmental office and institution.

These individuals, however, will have acquired a solid background in business, language skills and general education as well as training in the most modern equipment.

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SCHOOL OF BUSINESS BROCHURE

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=================== Grammatik IV ===================

Summary for A:\courtrp          Problems marked/detected: 0/7

Readability Statistics          Paragraph Statistics

 Flesch Reading Ease:  48         Number of paragraphs: 4
 Gunning's Fog Index:  14         Average length:  2.2 sentences
 Flesch-Kincaid Grade Level: 10

                     Sentence Statistics

  Number of sentences:  9             Passive voice:         4
  Average length:       13.5 words    Short (< 14 words):    6
  End with '?':         1             Long  (> 30 words):    0
  End with '!':         0

                       Word Statistics

  Number of words:      122           Syllables per word: 1.72
  Average length:       5.36 letters  Prepositions:         15


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COURT AND FREELANCE REPORTING, School of Business, AAS Degree.

WHAT DO COURT AND FREELANCE REPORTERS DO?

Court and freelance reporters make a word-for-word record of the proceedings of trials, legislative sessions, or other hearings. They use a shorthand machine to report verbatim what is said. The machine operates in a manner similar to a typewriter, but has only 23 keys. After a hearing, the reporters may transcribe the shorthand into a typewritten manuscript. Computer technology is used by reporters in preparing trial records.

Since matters of extreme importance hinge on their records, court and freelance reporters are required to maintain a high level of concentration and accuracy. They are often trusted not to divulge confidential information acquired in the course of their work.

SCHOOL OF BUSINESS BROCHURE

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=================== Grammatik IV ===================

Summary for A:\courtrp2         Problems marked/detected: 0/4

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  36        Number of paragraphs: 5
  Gunning's Fog Index:  16        Average length:  2.2 sentences
  Flesch-Kincaid Grade Level: 12

                         Sentence Statistics

  Number of sentences:  11              Passive voice:         1
  End with '?':         1               Short (< 14 words):    7
  End with '!':         0               Long  (> 30 words):    0
  Average length:       13.5 words

                           Word Statistics

  Number of words:      149             Syllables per word: 1.86
  Average length:       5.72 letters    Prepositions:         22
====================================================================
```

COURT AND FREELANCE REPORTING, School of Business, AAS Degree.

WHAT DOES FERRIS OFFER?

Ferris offers a two-year (eight academic quarters) program in court and freelance reporting that leads to an associate in applied science degree. At Ferris, a court reporting student may also obtain a bachelor of science degree in a number of areas, including business and education. Under this option, an additional two years of study would be required.

The curriculum provides thorough training in court and freelance reporting procedures, machine shorthand, and computer technology. Students must attain a minimum speed of 225 words per minute in machine shorthand.

Students receive specialized training in court reporting computer technology, legal citations, medical terminology, and transcript preparation. Students also take general education and business classes. The seventh academic quarter is spent off campus in internship with a practicing reporter. Such work experience is essential to the training of a competent professional.

SCHOOL OF ARTS AND SCIENCES BROCHURE

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=================== Grammatik IV ===================

Summary for A:\biotech       Problems marked/detected: 0/3

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  43        Number of paragraphs: 3
  Gunning's Fog Index:  15        Average length:  2.6 sentences
  Flesch-Kincaid Grade Level: 12

                       Sentence Statistics

  Number of sentences:  8       Passive voice:        2
  End with '?':         1       Short (< 14 words):   2
  End with '!':         0       Long  (> 30 words):   0
  Average length:       17.2 words

                         Word Statistics

  Number of words:      138     Syllables per word:   1.73
  Average length: 5.20 letters  Prepositions:         22

====================================================================
```

BIOTECHNOLOGY, School of Arts & Sciences, BS Degree

WHAT IS BIOTECHNOLOGY?

Across the country and around the world, biological organisms are being used for technological advances that improve the quality of our lives. The development of new and better medicines, the detection of disease genes, and the engineering of healthier and more nourishing agricultural products, are all examples of biotechnology. In these ways, biotechnology is changing our lives, expanding our horizons and increasing our options for dealing with our biological heritage.

Behind the scenes, away from all the publicity and fanfare, the biologist stands at the center of this miracle. Such an individual works in the lab, performs the experiments and gathers the data. The biologist is responsible for taking an abstract idea, and bringing it to fruition in the lab. Our program is designed for those who think their rightful place is at the bench.

SCHOOL OF ARTS AND SCIENCES BROCHURE

```
=================== Grammatik IV ===================

Summary for A:\biotech2      Problems marked/detected: 0/3


Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  49      Number of paragraphs: 4
  Gunning's Fog Index:  13      Average length:   2.5 sentences
  Flesch-Kincaid Grade Level: 10

                         Sentence Statistics

  Number of sentences:  10      Passive voice:        0
  End with '?':         1       Short (< 14 words):   6
  End with '!':         0       Long  (> 30 words):   0
  Average length:       14.1 words

                          Word Statistics

  Number of words:      141       Syllables per word:   1.70
  Average length:  5.26 letters   Prepositions:         16

====================================================================
```

BIOTECHNOLOGY, School of Arts & Sciences, BS Degree.

WHAT DOES THIS PROGRAM OFFER?

Biotechnology at Ferris is a rigorous third- and fourth-year course of study which offers extensive laboratory experience. In the first two quarters, students take two biochemistry labs each week, as well as labs in microbiology, chemical analysis and genetics. In the third quarter, students take immunology and embryology labs. Plans are underway to establish a co-op student program, enabling students to spend the summer quarter of the third year gaining work experience in a lab setting.

In the fourth year, students spend two full days each week in the laboratory. Lab work includes work in such areas as recombinant DNA, tissue culture and monoclonal antibodies. This one course alone offers students 360 hours of lab experience. Lectures and tutorials round out the educational experience gained in the fourth year.

SCHOOL OF ARTS AND SCIENCES BROCHURE

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=================== Grammatik IV ===================

Summary for A:\ornhort          Problems marked/detected: 0/1

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  11        Number of paragraphs: 1
  Gunning's Fog Index:  23        Average length:  1.0 sentences
  Flesch-Kincaid Grade Level: 19

                       Sentence Statistics

  Number of sentences:  1       Passive voice:         1
  End with '?':         0       Short (< 14 words):    0
  End with '!':         0       Long  (> 30 words):    0
  Average length:       29.0 words

                         Word Statistics

  Number of words:      29      Syllables per word:   1.96
  Prepositions:         3       Average length:     6.20 letters

=====================================================================
```

ORNAMENTAL HORTICULTURE TECHNOLOGY, School of Arts & Sciences, AAS Degree

PLANTING A CAREER

Graduates of the Ferris ornamental horticulture technology program are preared to use their skills and knowledge to beautify landscapes for homes, parks, schools, housing developments, golf courses and businesses.

SCHOOL OF ARTS & SCIENCES BROCHURE

```
=================== Grammatik IV ===================

Summary for A:\ornhort2      Problems marked/detected: 0/4

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  26        Number of paragraphs: 3
  Gunning's Fog Index:  20        Average length: 1.3 sentences
  Flesch-Kincaid Grade Level: 15

                         Sentence Statistics

  Number of sentences:  4       Passive voice:         0
  End with '?':         1       Short (< 14 words):    3
  End with '!':         0       Long  (> 30 words):    1
  Average length:       22.0 words

                          Word Statistics

  Number of words:      88      Syllables per word:    1.87
  Average length: 5.94 letters  Prepositions:          11

==================================================================
```

#ORNAMENTAL HORTICULTURE TECHNOLOGY, School of Arts & Sciences, AAS Degree

WHAT KINDS OF JOBS ARE AVAILABLE?

An ornamental horticulture graduate may work in a variety of positions. Alumni manage nurseries, work in plant propagation, growth and sales; they are landscape specialists who design, establish and maintain ornamental plantings; they work in grounds maintenance, managing the landscaping for housing developments, parks, schools, colleges, businesses and industries; they are turf specialists, working at golf courses and for lawn service companies and they work in sales for equipment companies and landscape suppliers.

SCHOOL OF PHARMACY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\pharm@f2      Problems marked/detected: 0/7

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  34      Number of paragraphs: 2
  Gunning's Fog Index:  20      Average length:   2.5 sentences
  Flesch-Kincaid Grade Level: 15

                       Sentence Statistics

  Number of sentences:  5         Passive voice:         3
  End with '?':         0         Short (< 14 words):    1
  End with '!':         0         Long  (> 30 words):    2
  Average length:       24.8 words

                         Word Statistics

  Number of words:      124       Syllables per word:    1.74
  Average length: 5.34 letters    Prepositions:          23

====================================================================
```

SCHOOL OF PHARMACY, Ferris State College

HOW TO ENROLL

Applications to the Ferris pre-pharmacy program (School of Arts and Sciences) or the pharmacy program (School of Pharmacy) may be obtained from the Office of Admissions, Ferris State College, Big Rapids, MI 49307 Applications are also available at the offices of Michigan high school and college counselors.

Applications for the School of Pharmacy may be submitted along with transcripts after one year of college has been completed, but no later than January 31 of the second pre-professional year. Selection will not be made until grades through the fifth term or the third semester of the pre-pharmacy program are made available. Notification of conditional acceptance will be sent after March 15. Final acceptance will be deferred until proof of the completion of all pre-pharmacy requirements is received.

SCHOOL OF PHARMACY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\pharm@f       Problems marked/detected: 0/3

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  25      Number of paragraphs: 3
  Gunning's Fog Index:  21      Average length:   1.3 sentences
  Flesch-Kincaid Grade Level: 15

                      Sentence Statistics

  Number of sentences:  4       Passive voice:        2
  End with '?':         0       Short (< 14 words):   1
  End with '!':         0       Long  (> 30 words):   0
  Average length:       18.5 words

                        Word Statistics

  Number of words:      74      Syllables per word:   1.93
  Average length: 5.50 letters  Prepositions:         16


====================================================================
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SCHOOL OF PHARMACY, Ferris State College

FERRIS OWNS NATIONAL REPUTATION

Ferris State has maintained a reputation for excellence since it was first accredited in 1883. The Ferris pharmacist has an excellent placement future with over half of the pharmacists in Michigan being Ferris graduates.

Graduates of the Ferris School of Pharmacy are well prepared to take the Michigan Board of Pharmacy Examination required for licensing.

The School is a member of the American Council on Pharmaceutical Education, the national accrediting agency for colleges of pharmacy.

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SCHOOL OF BUSINESS BROCHURE

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=================== Grammatik IV ===================

Summary for A:\bused        Problems marked/detected: 0/4

Readability Statistics         Paragraph Statistics

  Flesch Reading Ease:  11       Number of paragraphs: 2
  Gunning's Fog Index:  23       Average length:  3.0 sentences
  Flesch-Kincaid Grade Level: 16

                      Sentence Statistics

  Number of sentences:  6        Passive voice:         0
  End with '?':         0        Short (< 14 words):    3
  End with '!':         0        Long  (> 30 words):    0
  Average length:       14.6 words

                        Word Statistics

  Number of words:      88       Syllables per word:    2.14
  Average length: 6.28 letters   Prepositions:          10

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BUSINESS EDUCATION, Ctr. for Occ. Ed., School of Education, BS

FERRIS PROGRAM MEANS BUSINESS

To teach business you've got to know business, and graduates of the Ferris State College business education program know their business. FSC's four-year business education program prepares students for positions in secondary and post-secondary schools, business, industry, governmental agencies and service organizations. Graduates earn a bachelor of science degree and a state of Michigan secondary provisional teaching certificate. Completion of appropriate work experience or a business internship qualifies students for a vocational endorsement to the secondary provisional certificate.

SCHOOL OF BUSINESS BROCHURE

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=================== Grammatik IV ===================

Summary for A:\bused2       Problems marked/detected: 0/6

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  20        Number of paragraphs: 4
  Gunning's Fog Index:  19        Average length: 1.7 sentences
  Flesch-Kincaid Grade Level: 14

                       Sentence Statistics

  Number of sentences:  7         Passive voice:        1
  End with '?':         0         Short (< 14 words):   5
  End with '!':         0         Long  (> 30 words):   0
  Average length:       13.8 words

                         Word Statistics

  Number of words:      97        Syllables per word:   2.04
  Average length: 6.05 letters    Prepositions:         10

===================================================================
```

BUSINESS EDUCATION, Ctr. for Occ. Ed., School of Education, BS

CURRICULUM EMPHASIZES PROFESSIONAL PREPARATION

The business education curriculum prepares students for professional careers by meeting both their individual needs and occupational goals.

Business education majors may choose accounting, marketing/distributive education, office administration, data processing or secretarial as their area of specialization. Students also have the option of selecting a minor outside the field of business education, such as mathematics, chemistry, biology, general science, social studies, English or athletic coaching.

Completion of 200 quarter hours is required for graduation. Course work must include both a business teaching major and a teaching minor.

SCHOOL OF TECHNOLOGY BROCHURE

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=================== Grammatik IV ==================

Summary for A:\teched        Problems marked/detected: 0/5

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  36        Number of paragraphs: 3
  Gunning's Fog Index:  17        Average length:  2.0 sentences
  Flesch-Kincaid Grade Level: 13


                         Sentence Statistics

  Number of sentences:  6         Passive voice:        0
  End with '?':         0         Short (< 14 words):   3
  End with '!':         0         Long  (> 30 words):   1
  Average length:       17.3 words


                           Word Statistics

  Number of words:      104       Syllables per word:   1.81
  Average length:  5.40 letters   Prepositions:         14

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TECHNICAL EDUCATION, Ctr. for Occ. Ed., School of Education, BS

TEACHER SHORTAGE SPELLS OPPORTUNITY

Rapid changes in technology have produced a strong demand for teachers in all fields of industry. A critical shortage in the number of qualified technical teachers in Michigan means that this will continue to be an are of excellent career opportunities.

Technical educators staff secondary schools, area vocational centers, and post secondary technical programs, helping fill the manpower needs of industry. Technical teachers instruct students in the skills necessary to excel in various technical areas and help then develop an anility to solve the sometimes complex tasks that will confront them in the future.

SCHOOL OF TECHNOLOGY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\teched2       Problems marked/detected: 0/9

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  3         Number of paragraphs: 5
  Gunning's Fog Index:  22        Average length:  1.6 sentences
  Flesch-Kincaid Grade Level: 17

                         Sentence Statistics

  Number of sentences:  8         Passive voice:         2
  End with '?':         0         Short (< 14 words):    3
  End with '!':         0         Long  (> 30 words):    1
  Average length:       15.1 words

                          Word Statistics

  Number of words:      121       Syllables per word:    2.23
  Average length:   6.54 letters  Prepositions:          12

==================================================================
```

TECHNICAL EDUCATION, Ctr. for Occ. Ed., School of Education, BS.

FERRIS PROGRAMS NATIONALLY-ACCLAIMED

The Ferris technical education program provides a balanced mix of courses in four major areas - technical education, professional education, field experience and general and liberal education.

The technical education program is ideally suited for community college transfer students who can establish their occupational major via their associate degree program.

Ferris' nationally-acclaimed technical instructional programs can also provide the foundation of the student's job preparation. Approximately one-third of the graduation course requirements in the program are in each major's chosen field.

A core curriculum of professional education courses are offered, including instructional design, lab-shop organization and management, test construction and interpretation, principles of general and vocational education, audio-visual principles and teaching methods.

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SCHOOL OF ALLIED HEALTH BROCHURE

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=================== Grammatik IV ===================

Summary for A:\dentech       Problems marked/detected: 0/4

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  39        Number of paragraphs: 3
  Gunning's Fog Index:  17        Average length:  1.6 sentences
  Flesch-Kincaid Grade Level: 12

                       Sentence Statistics

  Number of sentences:  5         Passive voice:          1
  End with '?':         1         Short (< 14 words):     1
  End with '!':         0         Long  (> 30 words):     0
  Average length:       15.0 words

                         Word Statistics

  Number of words:      75        Syllables per word:     1.80
  Average length:  5.96 letters   Prepositions:           11

=====================================================================
```

DENTAL TECHNOLOGY, School of Allied Health, AAS Degree

WHAT ARE DENTAL TECHNICIANS?

Dental technicians are trained in the construction of prosthetic appliances for the replacement of natural teeth which have been lost either by disease or accident.

As important members of the dental health team, the dental technician's skills and knowledge are invaluable. In an application of both art and science, the technician creates appliances from dentists' prescriptions. These appliances include complete and partial dentures, fixed crown and bridgework, ceramics and orthodontic appliances.

SCHOOL OF ALLIED HEALTH BROCHURE

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=================== Grammatik IV ===================

Summary for A:\dentech2      Problems marked/detected: 0/2

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  4        Number of paragraphs: 2
  Gunning's Fog Index:  22       Average length:  2.0 sentences
  Flesch-Kincaid Grade Level: 18


                       Sentence Statistics

  Number of sentences:  4        Passive voice:        2
  End with '?':         0        Short (< 14 words):   0
  End with '!':         0        Long  (> 30 words):   0
  Average length:       20.0 words

                         Word Statistics

  Number of words:      80       Syllables per word:   2.16
 Average length:  6.40 letters   Prepositions:         10

======================================================================
```

DENTAL TECHNOLOGY, School of Allied Health, AAS Degree

DENTAL TECHNOLOGY CAREERS PERSONALLY SATISFYING

Careers in dental technology are both challenging and satisfying for those interested in aiding the nation's dental health and who enjoy working with their hands. Dental technicians generally are well paid, receive many opportunities for advancement and have job security.

Dental technicians are employed in private and commercial dental laboratories, governmental agencies and hospitals serving many dentists. Technicians may establish their own dental laboratories, becoming independent business persons, or work for dental supply companies as technical representatives, salespersons or developers.

SCHOOL OF ALLIED HEALTH BROCHURE

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=================== Grammatik IV ===================

Summary for A:\nucmed       Problems marked/detected: 0/2

Readability Statistics         Paragraph Statistics

  Flesch Reading Ease:  16        Number of paragraphs: 2
  Gunning's Fog Index:  19        Average length:  2.5 sentences
  Flesch-Kincaid Grade Level: 15

                     Sentence Statistics

  Number of sentences:  5         Passive voice:          1
  End with '?':         1         Short (< 14 words):     3
  End with '!':         0         Long  (> 30 words):     0
  Average length:       16.0 words

                       Word Statistics

  Number of words:      80        Syllables per word:     2.06
  Average length: 6.05 letters    Prepositions:           12

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NUCLEAR MEDICINE TECHNOLOGY, School of Allied Health, AAS Degree

WHAT DO NUCLEAR MEDICINE TECHNOLOGISTS DO?

Nuclear medicine technologists are professionals who work in a hospital or laboratory. They operate, or assist a physician in operating imaging equipment used to detect radiation. They work with patients, get information from patient records, make dose claculations for patient studies, and conduct laboratory studies on specimens. Technologsts also are greatly concerned with safety and are responsible for disposal of radioactive waste, safe storage of radioactive material and the inventory and control of radiopharmaceuticals.

SCHOOL OF ALLIED HEALTH BROCHURE

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=================== Grammatik IV ===================

Summary for A:\nucmed2       Problems marked/detected: 0/3

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  41        Number of paragraphs: 3
  Gunning's Fog Index:  15        Average length:  2.3 sentences
  Flesch-Kincaid Grade Level: 11

                     Sentence Statistics

  Number of sentences:  7         Passive voice:        1
  End with '?':         1         Short (< 14 words):   3
  End with '!':         0         Long  (> 30 words):   0
  Average length:       15.1 words

                       Word Statistics

  Number of words:      106       Syllables per word:   1.78
  Average length:  5.39 letters   Prepositions:         13

====================================================================
```

NUCLEAR MEDICINE TECHNOLOGY, School of Allied Health, AAS Degree

WHAT DOES FERRIS OFFER?

The FSC nuclear medicine technology program is seven academic quarters in length and leads to an associate in applied science degree. The first four quarters are spent on the Big Rapids campus. The program includes courses in human anatomy, physiology, radiation and nuclear physics, and nuclear medicine theory and methods, as well as general education.

Students spend the final three academic quarters in a hospital, practicing the theory and skills learned in class. Graduates are eligible to take the national certifying examination for registry in nuclear medicine technology. They also may enter the FSC bachelor of science degree program in nuclear medicine.

SCHOOL OF OPTOMETRY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\optom         Problems marked/detected: 0/6

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  9         Number of paragraphs: 4
  Gunning's Fog Index:  21        Average length:  1.5 sentences
  Flesch-Kincaid Grade Level: 17

                        Sentence Statistics

  Number of sentences:  6         Passive voice:        3
  End with '?':         0         Short (< 14 words):   1
  End with '!':         0         Long  (> 30 words):   1
  Average length:       19.3 words

                         Word Statistics

  Number of words:      116       Syllables per word:   2.11
  Average length:  5.82 letters   Prepositions:         19

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OPTOMETRY, College of Optometry, O.D. Degree.

ABOUT THE PROGRAM

The College of Optometry at Ferris State University was originated in 1975 and remains the only institution in Michigan (one of 16 nationally) offering an optometry program. And because there are so few programs, the demand for the optometric graduate continues to proliferate.

The curriculum is designed to meet the standards of the Association of Schools and Colleges of Optometry. Ferris' College of Optometry is fully accredited by the Council of Optometric Education of the American Optometric Association.

Besides the on-campus clinic facilities at Ferris, the College of Optometry has clinical affiliations with Veterans Administration hospitals, Air Force base hospitals, Optometric referral centers, and the health care facilities of several Michigan prisons.

SCHOOL OF OPTOMETRY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\optom2        Problems marked/detected: 0/3

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  39        Number of paragraphs: 4
  Gunning's Fog Index:  15        Average length:  1.7 sentences
  Flesch-Kincaid Grade Level: 11

                      Sentence Statistics

  Number of sentences:  7         Passive voice:         0
  End with '?':         1         Short (< 14 words):    5
  End with '!':         0         Long  (> 30 words):    0
  Average length:       14.0 words

                        Word Statistics

  Number of words:      98        Syllables per word:    1.82
  Average length:  5.55 letters   Prepositions:          12

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```

OPTOMETRY, College of Optometry, O.D. Degree.

WHAT ARE THE CAREER OPPORTUNITIES?

Optometry os one of the top ten income-earning professions in the country. With favorable working conditions, regular hours and a minimum of emergency calls, it offers many career options and great freedom in choosing a location to live and practice.

The most common career option for the optometrist is private practice. About two-thirds of all optometrists are independent professionals and have their own practices. Another popular career option is group practice where optometrists practice together or with other health care professionals to form a health care team.

SCHOOL OF OPTOMETRY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\optic2        Problems marked/detected: 0/2

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  39        Number of paragraphs: 2
  Gunning's Fog Index:  17        Average length:  2.0 sentences
  Flesch-Kincaid Grade Level: 12

                       Sentence Statistics

  Number of sentences:  4         Passive voice:         1
  End with '?':         1         Short (< 14 words):    1
  End with '!':         0         Long  (> 30 words):    0
  Average length:       18.2 words

                         Word Statistics

  Number of words:      73        Syllables per word:    1.76
  Average length:  5.31 letters   Prepositions:          11

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OPTICIANRY, AAS Degree

WHAT IS THE STRUCTURE OF THE FSU OPTICIANRY PROGRAM?

At Ferris, the opticianry student receives a strong "hands-on" background in both the laboratory and the University's own dispensary, which serves the campus and surrounding community. And, in addition to professional courses, there is a six-week externship at the end of the student's second year. This externship is held at an off-campus site in Michigan with an ABO (American Board of Opticianry) certified optician.

SCHOOL OF OPTOMETRY BROCHURE

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=================== Grammatik IV ===================

Summary for A:\optic        Problems marked/detected: 0/2

Readability Statistics         Paragraph Statistics

  Flesch Reading Ease:  25       Number of paragraphs: 2
  Gunning's Fog Index:  19       Average length:  2.5 sentences
  Flesch-Kincaid Grade Level: 14

                    Sentence Statistics

  Number of sentences:  5        Passive voice:        1
  End with '?':         1        Short (< 14 words):   2
  End with '!':         0        Long  (> 30 words):   0
  Average length:       16.4 words

                      Word Statistics

  Number of words:      82       Syllables per word:   1.95
  Average length:  5.90 letters  Prepositions:         14

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OPTICIANRY, AAS Degree

WHAT IS SPECIAL ABOUT FERRIS' OPTICIANRY PROGRAM?

The Ferris State University associate degree program in opticianry is a nationally recognized curriculum which fully qualifies the graduate for professional entry-level employment. Since the first class graduated in 1961, all FSU graduates have been offered employment in the field. Employment offers have actually increased during periods of widespread unemployment in other occupations. During the past four years, demand for Ferris graduates has been the highest ever, with at least four positions available for every person.

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HOUSING OFFICE MAILING

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=================== Grammatik IV ===================

Summary for A:\housltr2      Problems marked/detected: 7/7

Readability Statistics         Paragraph Statistics

  Flesch Reading Ease:  53       Number of paragraphs: 2
  Gunning's Fog Index:  13       Average length:  3.5 sentences
  Flesch-Kincaid Grade Level: 10

                      Sentence Statistics

  Number of sentences:  7        Passive voice:          0
  End with '?':         0        Short (< 14 words):     2
  End with '!':         0        Long  (> 30 words):     0
  Average length:       18.0 words

                        Word Statistics

  Number of words:      126      Syllables per word:     1.60
  Average length:  5.00 letters  Prepositions:           16

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LETTERHEAD, FSU HOUSING OFFICE

If you desire to make other housing arrangements, you must first apply by letter to the Housing Office, South Commons. In return, you will receive an application form which should be completed and returned. No student should make any arrangements to live off campus without first having obtained written authorization from the Housing Office. Students must meet one of the requirements to be approved off campus (20 years of age, 90 credit hours or 6 quarters in a residence hall). STUDENTS WHO HAVE NOT FOLLOWED THE PROPER PROCEDURE FOR OBTAINING APPROVAL TO LIVE OFF CAMPUS WILL NOT BE PERMITTED TO ENROLL.

If you are a married student or single parent with children you may inquire about our campus apartments. Please write or contact the Housing Office for an application.

HOUSING OFFICE MAILING

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=================== Grammatik IV ===================

Summary for A:\housltr       Problems marked/detected: 0/5

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  52        Number of paragraphs: 2
  Gunning's Fog Index:  13        Average length:  3.5 sentences
  Flesch-Kincaid Grade Level: 10

                       Sentence Statistics

  Number of sentences:  7         Passive voice:         3
  End with '?':         0         Short (< 14 words):    3
  End with '!':         0         Long  (> 30 words):    1
  Average length:       17.2 words

                         Word Statistics

  Number of words:      121       Syllables per word:    1.62
  Average length:  5.23 letters   Prepositions:          18

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LETTERHEAD, FSU HOUSING OFFICE

Complete the enclosed Contract for Residence and return it to the Business Office along with the required $90 contract guarantee. in the envelope enclosed. (Do not return the contract without the $90 contract guarantee.) Housing assignments cannot be made until this has been completed. Please acquaint yourself with the "Explanation of Residence Hall Contract", read and retain for your records.

You may have already received an invitation from the Coordinator of Orientation to attend a summer orientation-registration program for all new students. While you are on campus for this session, if your contract has been returned and your $90 contract guarantee paid, you may choose the hall in which you want to live. Housing assignments are made on a "first come first serve" basis.

PUBLIC SAFETY OFFICE MAILING

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=================== Grammatik IV ===================

Summary for A:\houscar2      Problems marked/detected: 0/8

Readability Statistics         Paragraph Statistics

  Flesch Reading Ease:  30        Number of paragraphs: 5
  Gunning's Fog Index:  17        Average length:  1.6 sentences
  Flesch-Kincaid Grade Level: 13

                       Sentence Statistics

  Number of sentences:  8         Passive voice:        5
  End with '?':         0         Short (< 14 words):   3
  End with '!':         0         Long  (> 30 words):   0
  Average length:       15.2 words

                         Word Statistics

  Number of words:      122       Syllables per word:   1.91
  Average length:  5.61 letters   Prepositions:         17

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LETTERHEAD (peach), FSU DEPARTMENT OF PUBLIC SAFETY

Time conflicts between classes and employment in the Big Rapids area or elsewhere are not considered valid reasons for special privileges.

Parking regulations established under the University Parking, Traffic and Pedestrian Ordinance and enacted September 25, 1981, by Ferris State University Board of Control are strictly enforced.

Visitor permits are FREE. Parents relatives and visitors desiring to vist our campus must obtain a visitor's permit from the Department of Public Safety. We will attempt to park guests as close as possible to the person or buildings being visited.

Presently the University is involved in a comprehensive study of parking needs and is attempting to upgrade parking facilities. Your cooperation and adherence to our parking regulations is appreciated.

(NOTE: Typos are verbatim from the original. -DM)

PUBLIC SAFETY OFFICE MAILING

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=================== Grammatik IV ===================

Summary for A:\houscar       Problems marked/detected: 0/4

Readability Statistics          Paragraph Statistics

  Flesch Reading Ease:  37       Number of paragraphs: 5
  Gunning's Fog Index:  13       Average length:  1.6 sentences
  Flesch-Kincaid Grade Level: 12

                         Sentence Statistics

  Number of sentences:  8        Passive voice:        1
  End with '?':         0        Short (< 14 words):   4
  End with '!':         0        Long  (> 30 words):   0
  Average length:       14.1 words

                          Word Statistics

  Number of words:      113      Syllables per word:   1.84
  Average length:  5.39 letters  Prepositions:         21

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LETTERHEAD (peach), FSU DEPARTMENT OF PUBLIC SAFETY

On behalf of the Department of Public Safety, we welcome you to Gerris State Unviversity. We also hasten to provide you with this advance alert regarding a policy which needs your attention before problems arise. Unfortunately because of our limited parking spaces, FRESHMAN are PROHIBITED from possessing or operating a motor vehicle on campus. This includes parking and/or driving a vehicle on campus.

There are exceptions to this rule, however,..... as follows:

1. Freshmen students whose spouse/children are residing with them.
2. Freshmen students who commute daily to the Campus from their parents residents.
3. Physically handicapped students as determined and certified by the University Health Center.

APPENDIX G

ACTION PLAN FOR THE RECRUITMENT AND RETENTION OF NONTRADITIONAL STUDENTS AT FERRIS STATE UNIVERSITY

Action Plan

The Nontraditional Student at Ferris State University: Implications for Recruitment and Retention

Sharon K. Octernaud, M.S.
Ferris State University
July, 1990

The Nontraditional Student at Ferris State University: Implications for Recruitment and Retention

As the number of high school graduates decreases, Ferris State University (FSU) will increasingly compete with the other fourteen state universities, community colleges, and private schools for high school students. Therefore, in an effort to maintain current enrollment levels, Ferris will need to recruit actively nontraditional students (students aged twenty-five and older).

The recognition of and adaptation to the changes in the Ferris student population are of utmost importance to the university if administrators and faculty are to assess successfully the effects of this population on the institution's academic programs and fiscal health. The future of the institution depends upon the ability of Ferris personnel to forecast the needs of their students and in the willingness of the academic and administrative staff to serve those needs.

This action plan summarizes the findings and outlines the recommendations for the recruitment and retention of nontraditional students at Ferris State University as presented in a major applied research project (MARP). The entire MARP is available for review; a copy has been placed in the Ferris library and in the Office of Academic Affairs.

Who are these nontraditional students?

The examination of the characteristics and needs of students aged twenty-five and older yields a complex picture. Many adults are pragmatic and vocationally motivated in their studies. Others pursue education for developmental reasons and yet others for personal enrichment. Not only are their reasons for returning to school diverse but so are their learning styles. Add to this a wide range of family responsibilities and community obligations, and the complexity of designing and marketing educational programs becomes an ever-changing challenge for educational institutions, public officials, and business and industry.

What is the demographic profile of a Ferris student?

This study used enrollment data consisting of all students registered for credit courses at Ferris State University on the fifth day of classes during the fall quarter of 1989. Information was collected on variables that included: age, gender, race or ethnic background, home location as determined by zip code, full-time or part-time enrollment, transfer credit, high school grade point average, ACT composite, and distribution in Ferris programs.

When regarding the total student population at Ferris, the demographic profile of a typical student during the fall quarter, 1989, was a single, white male enrolled full-time in the School of Business. He did not transfer in any credit hours, his high school grade point average was 2.66, and his ACT composite score was 16.8. His FSU cumulative grade point average was 2.75.

The demographic profile of a traditional student was nearly identical to that of all students except that his FSU cumulative grade point average was slightly lower, 2.66. The demographic profile of a nontraditional student for the same time period remained a single, white male enrolled full-time in the School of Business. However, he transferred in credit hours, had a lower high school grade point average of 2.64, a lower ACT composite score of 16.7, and a higher FSU cumulative grade point average of 3.07.

Of the 11,878 students on the Ferris campus, 80.63 percent were traditional students and 19.37

percent were nontraditional students. The nontraditional FSU student population did not comprise a major portion of the total student population. However, it is expected that the nontraditional student population at Ferris will increase and that enrollment at the institution will follow national trends. Even though the population of Big Rapids is decreasing, the percentage of the population between the ages of twenty-five and seventy-five is increasing. This projected increase is expected to plateau by 1994. A nontraditional student market is available locally and efforts need to be made to attract this group to campus.

At the national level, part-time enrollment trends are much higher in both the traditional and nontraditional student populations than at Ferris. It is anticipated that part-time enrollment will increase at Ferris thus following national trends.

Nationally, female enrollment outnumbered male enrollment in both the traditional and nontraditional student populations. At Ferris, males dominated both of these groups. In the future, as an increasing number of females enter technical programs, female enrollment at Ferris is expected to increase. In 1989, minority student representation on campus was about eight percent and the estimated minority population of the City of Big Rapids was about eight percent. The estimated minority population of Grand Rapids was about twenty-three percent during this same year. However, because several postsecondary institutions are located in Grand Rapids, it is unlikely that the minority students from Grand Rapids will choose to commute to Big Rapids unless they are attracted to a specific program that is not available in Grand Rapids.

Ferris primarily serves Michigan residents. Less than four percent (3.45%) of the total FSU student population came from outside the state. Of the traditional student population, 34.83% came from the Royal Oak, Detroit, and Flint areas whereas only 15.65% of the nontraditional students came from these southeastern areas. Of the nontraditional students, 44.76% came from the Grand Rapids/Big Rapids zip code area. Traditional students attending Ferris from this area totaled 21.27%. A review of the literature reveals that the majority of nontraditional students travel to class in twenty minutes or less. Most of the remaining students can get to class in forty-five minutes with one hour being the extreme upper limit. These data seem to indicate that nontraditional students move to the Big Rapids area and enroll as full-time students in order to complete their degree requirements as quickly as possible.

Of 11,878 FSU students, 19.37% are aged 25 and older.

Of the full-time nontraditional students, 71.51 percent transferred in credit hours. This trend indicates that the laddering concept outlined in FSU's mission statement is in place and is working.

71.51% of the full-time nontraditional students transferred in credits.

A higher percentage of full-time (13.33%) and part-time (16.28%) nontraditional students had high school grade point averages below 2.00 than did the full-time (9.57%) and part-time (12.59%) traditional students. However, the full-time nontraditional student had a mean FSU grade point average of 2.92 and the part-time nontraditional student had a mean of 3.22. This is contrasted with the full-time traditional student who had a lower mean FSU grade point average of 2.65 and the part-time traditional student who had a lower mean FSU grade point average of 2.58.

Ethnicity had relatively no effect on mean high school grade point averages within the various Ferris student groups. The lowest mean ACT composite for both the traditional and nontraditional student was in the black ethnic category. This trend continued when comparing traditional and nontraditional students by FSU cumulative grade point averages and ethnicity. The lowest mean FSU grade point averages for both the traditional and nontraditional students were in the black ethnic category. Other minority groups comprised 1.63% of the total student population making inferences difficult due to the small population size.

Ferris exceeds national trends in that 71.14% of the nontraditional student population was enrolled in the business, computer science, education, and health fields. Nationally, forty-five percent of the courses taken by adults are concentrated in these four career areas. This finding is not surprising in that Ferris specializes in technical and career programs. Enrollment patterns in the various schools at FSU for full-time nontraditional and traditional students were similar as were enrollment patterns for most of the part-time students.

Can Ferris adapt existing recruitment and retention activities?

Due, in part, to an ambiguity of definition for the nontraditional student, a review of the literature reveals inadequate research on recruitment and retention strategies for nontraditional students. Reported student demographic data for nontraditional students at postsecondary institutions in the United States also were inadequate. When performed on a mainframe computer, the types of demographic anaylses made for this study took weeks and sometimes months of programming time and, therefore, were very costly. Unless institutions were required to supply this type of information for state or federal reports, it probably was not gathered. With the recent arrival of the 386-based microcomputer and software such as PC-File and Reflex, these kinds of analyses can be made in hours thus greatly reducing the cost. To date, many educational institutions continue to lack the tools and the technical expertise required to manipulate such data. However, future research most likely will include an increased amount of statistical information on student demographics.

Student demographic data can be quickly and inexpensively analyzed.

Identifying recruitment and retention activities for nontraditional students at other institutions that could impact Ferris policies was difficult because of the nature of Ferris and its physical location. Because FSU is an open admissions institution offering career-oriented programs, ACT scores of Ferris students are often lower than those found at most four-year institutions. Furthermore, Ferris offerings are similar to those at community colleges in that they are technical in scope and use a hands-on approach in the classroom. The laddering concept encourages students to transfer credits from two-year degree programs at Ferris, community colleges, or other baccalaureate institutions into four-year degree programs at Ferris. Because FSU offers many baccalaureate degree programs and a few graduate programs, it also has characteristics similar to those found at four-year institutions. However, because of the technical nature of the programs, the four-year degree programs at Ferris tend to attract a different type of student than do the four-year degree programs at liberal arts institutions.

Also, it is anticipated that the demographic characteristics of the nontraditional student at Ferris do not follow the national trends for nontraditional students because of the physical location of the campus. Whereas, community colleges often are located in urban areas, Ferris is situated in a rural community with the university student population about equaling the city population.

What are the findings of this study?

As a result of this study, the following conclusions are presented.

1. Future researchers should strive toward greater consistency when defining the student population aged twenty-five and older.

2. Due to the nature of Ferris State University and its physical location, recruitment and retention activities used at other postsecondary institutions should be evaluated carefully before being adopted.

3. Ferris State University currently lags behind national trends in the percentage of nontraditional students served at the institution. However, due to a decrease in high school graduates and an increase in the percentage of older Americans, the number of nontraditional students at Ferris State University is expected to increase.

4. Information is the key to every aspect of a student's academic endeavor. If Ferris State University is to meet the needs of students; administrators, faculty, and staff must be aware of the demographic characteristics, learning styles, and needs of the populace served.

5. Looking at the demographic profiles of all students, of nontraditional students, or of traditional students is insufficient without taking into account the context of the institution or the program. The demographic data must be analyzed by school or even by program on a regular, continuing basis.

6. Respondents to the questionnaire indicated an awareness of the issues involved with the recruitment and retention of nontraditional students. These administrators and faculty members provided useful recommendations for future activities and could serve as capable advisors for future planning.

7. The FSU school bulletins, informational program brochures, and admissions letters had a reading level too high for students entering FSU and these materials rarely depicted adult learners in photos.

8. A large number of local adults needs to be convinced that there is much to be gained through education. Marketing strategies must be developed to attract these potential students to campus.

9. If the needs of the new traditional (as opposed to the nontraditional) student are to be met, recruiting and teaching approaches must be adapted to the audience served. Therefore, it behooves FSU academic and administrative staff to study, discuss, and implement this action plan.

What can Ferris do to recruit and retain nontraditional students?

Faculty, administration, and staff at Ferris State University need to be aware of the changing student population and must be capable of adapting to the needs of these learners. In order to do so, university leadership must minimize institutional barriers and provide a means of responding quickly and effectively to a continually changing student population. As a result of these findings, the following recommendations are made.

1. It is recommended that deans' offices be provided with demographic data on all students enrolled in their schools. The Office of Academic Affairs would make this information available on disk in PC-File format no later than the third week of fall quarter. Training would be provided by the Office of Academic Affairs or the Instructional Resource Center to administrators and secretaries as designated by their deans to assist the schools in the manipulation and understanding of these files.

2. It is recommended that inservice training on the characteristics and needs of nontraditional students be given to FSU administration, faculty, and staff. These sessions would outline what to expect from students aged twenty-five and older. The positive qualities brought by these students to campus would be discussed in the workshops. For the initial sessions, an outside consultant would be hired to present the training. This would serve as an indicator to Ferris personnel that the administration is seriously committed to the project. Throughout the year, additional sessions would be organized by the Office of Human Resources and/or the Timme Center for Faculty Development.

Inservice training is needed for all personnel.

3. It is suggested that inservice training be given to Ferris faculty on effective teaching methods for nontraditional students. Again, hiring an outside consultant would serve as an indicator of administrative support of the project. Initial training could be offered during faculty orientation at the beginning of the school year. Other one-hour and half-day workshops could be offered throughout the year in the Instructional Resource Center. To keep training costs to a minimum, the majority of these workshops would be facilitated by Ferris administrators and faculty with guest speakers presenting occasional sessions.

4. It is suggested that service hours for the Admissions Office, Registrar's Office, Financial Aid Office, Minority Affairs Office, Job Placement Office, and Business Office be extended to include weekend and evening hours during the periods of registration, schedule changes, and student orientation.

5. It is recommended that a full-color informational brochure be produced introducing nontraditional students to the services and programs available to adult learners at Ferris as well as outlining admissions requirements and procedures.

6. It is recommended that articles highlighting services, program offerings, and innovative instructional delivery systems for the nontraditional student be featured once a month in the weekly employee newsletter, *FYI*, to increase campus awareness of the needs and characteristics of the adult learner.

7. It is suggested that a column for and about nontraditional students written by a nontraditional student be included in the biweekly student newspaper, *The Torch*.

8. It is recommended that school bulletins, informational program brochures, and admissions letters be evaluated and then revised to have a reading level no higher than twelve and to include pictures of nontraditional students when appropriate.

9. It is recommended that a toll-free number for admissions inquiries of nontraditional students be established and advertised. This line would be monitored by personnel having specialized skills in dealing with adult learners and a working knowledge of Ferris programs and entry requirements.

10. It is suggested that FSU informational booths be located at community events and that program offerings be publicized through bulletin boards, radio spots, newspaper advertisements, and campus television.

11. It is recommended that technology be used to the fullest extent possible to improve instructional delivery and to streamline administrative procedures. Computer-assisted instruction, interactive video, video tapes, desktop presentations, and simulations could be used to accommodate different learning styles and scheduling conflicts. Expanded telephone registration, on-line access to student demographic data, and microcomputer data bases could be used to improve communication.

12. It is recommended that nontraditional students be required to attend a Ferris orientation seminar. This seminar would include speakers from student services, job placement, financial aid, collegiate skills, academic counseling, personal counseling, minority affairs, recreation, the library, and the health center. The students would be introduced to faces, names, and services available through various offices on campus. Adult learners would receive instruction in library research using microfiche readers, microfilm readers, and CD-ROM's. The seminar would also help these students to identify their personal learning styles, motivators, and educational goals as well as to develop a sense of belonging on campus.

13. It is recommended that campus-sponsored activities for the spouses, children, families, and friends of nontraditional students be scheduled. It is essential that the support groups of nontraditional students be recognized by the institution. Not only do they assist in retention efforts but they are potential students as well.

14. It is suggested that an open house or exploratory evening when students are encouraged to bring college-age guests to class be regularly scheduled. This would provide interested adults with the opportunity to observe classroom presentations and to visit campus facilities.

15. It is suggested that a tuition waiver be granted for the first class taken by nontraditional students at Ferris.

16. It is recommended that a means of rewarding faculty who are innovative and/or particularly successful in meeting the needs of nontraditional students be established.

17. It is recommended that a core of faculty who are interested in working with nontraditional students be identified. These educators would be assigned nontraditional students as advisees and would maintain periodic contact with their designated adult learners throughout the school year.

18. It is recommended that a strategic plan be developed for the institution which addresses the needs of the nontraditional student population. In developing this plan, the institutional mission and clientele served must be clearly defined.

19. It is suggested that grant money to assist in various aspects of nontraditional student recruitment and retention be sought.

20. It is recommended that nontraditional students be tracked from the time of first inquiry, to graduation, and on through job placement. Follow-up studies should be made to determine the effectiveness of the entire educational experience.

21. It is recommended that campus personnel work with representatives from business and industry and Ferris alumni to promote FSU programs and to attract nontraditional students to campus.

22. It is recommended that curricula be designed to meet the needs of the work force and to efficiently and effectively retrain workers. Working with advisory groups from business and industry, FSU administrators should not only examine course content but also the instructional format, class duration time, number of class sessions, and facilities used.

23. It is recommended that a nontraditional student organization be established on campus. This organization would be given a meeting room, accorded a telephone line, assigned a faculty advisor, and granted a small budget. This group would be encouraged to develop a peer counseling program to provide incoming and continuing support to adult learners.

Peer counselors provide support to incoming nontraditional students.

24. It is recommended that scholarships for minority students aged twenty-five or older be established by the Office of Minority Affairs.

25. It is recommended that within budgetary constraints, the recommendations presented in this action plan be implemented as quickly as possible to meet the recruitment and retention needs of nontraditional students at Ferris State University.

26. It is recommended that periodic evaluation of recruitment and retention efforts be made to identify the strengths and weaknesses of current activities as methods and procedures will need to be revised to meet the changing needs of the campus.

BIOGRAPHICAL SKETCH OF PARTICIPANT

Sharon K. Octernaud, the oldest of five children, was born in the upper pennisula of Michigan in 1949. Both of her parents were educators and her early years were those of a traditional student. She graduated from a small rural high school in 1967 and from Alma College in 1970 with a bachelor of arts degree and a secondary teaching certificate.

For the following decade she lived in Paris, France where she was resident director of a junior year abroad program, director of an English language library for the blind, sales agent for two airlines, and office manager of a large church. Her role of a nontraditional student began after her return to the United States when employers felt that this unemployed mother had few marketable skills and no recent American work experience.

In 1988, she graduated from Ferris State University with a master of science degree in occupational education with a specialty area in human resource development. This degree was earned while working full-time at Ferris and raising two grade school daughters. For the 1989/90 academic year, she received a graduate fellowship in the

Programs for Higher Education at Nova University where she worked on a doctor of education degree with a specialization in adult education. Sharon has completed her fellowship and her sabbatical year and has resumed her duties in the Office of Academic Computing at Ferris where she assists faculty and staff in the exploration and use of microcomputer applications. She is currently working on her fourth microcomputer applications text book and is an advocate of using new technology to enhance classroom instruction.

I certify that I have read and am willing to sponsor this Major Applied Research Project submitted by Sharon K. Octernaud. In my opinion it conforms to acceptable standards and is fully adequate in scope and quality as a Major Applied Research Project for the degree of Doctor of Education at Nova University.

July 16, 1990
Date

Peter K. Mills, Ed.D.
MARP Advisor

I certify that I have read this Major Applied Research Project and in my opinion it conforms to acceptable standards for a Major Applied Research Project for the degree of Doctor of Education at Nova University.

July 17, 1990
Date

Thomas W. MacFarland, Ed.D.
Local Committee Member

This Major Applied Research Project was submitted to the Central Staff of the Programs for Higher Education of Nova University and is acceptable as partial fulfillment of the requirments for the degree of Doctor of Education.

22 July 1990
Date

BRHerrscher
Barton R. Herrscher, Ed.D.
Central Staff Committee Member